

| SEQ ID NO: | Predicted beginning nucleotide location corresponding to first amino acid residue of amino acid sequence | Predicted end nucleotide location corresponding to first amino acid residue of amino acid sequence | Amino acid segment containing signal peptide (A=Alanine, C=Cysteine, D=Aspartic Acid, E=Glutamic Acid, F=Phenylalanine, G=Glycine, H=Histidine, I=Isoleucine, K=Lysine, L=Leucine, M=Methionine, N=Asparagine, P=Proline, Q=Glutamine, R=Arginine, S=Serine, T=Threonine, V=Valine, W=Tryptophan, Y=Tyrosine, X=Unknown, *=Stop Codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|------------|--|--|--|
| | | | ISDYFERRVEQPLYGLDGSAAKEATEEQSALPTLMSVMLAKPRL DTEQLAQRGAGLCFTFVSAQQNSPSSSTGSGNTEHSCSSQKQISI QHRQT\QSDLTIEKISALENSKNSDLEKKEGRIDDLRANCDLR ROI\DEQQKMLEKYK\ERLNRCDNEPRNLFIEKSKQEKMACRD KSMQDRRLRLGHFTTVRHGASFTQWTDGYAFQNLIKQQRINSQ REEIERQRKMLAKRKPPAMGQAPPATNEQKQKSKTNGAENETL TLAEVHEQEIEIFKLRLGHLKKEAEIQAELERLERVRNLHIREL KRIHNEDNSQFKDHPTLNDRYLLHLLGRGGFSEVYKAFDLTEQ RYVAVKIHQLNKNWRDEKKNYHKKHACREYRIHKELDHPRIVKL YDYFSLDSDSFCVLEYCEGNDLDFYLYKQKMLMSEKEARSIMQ IVNALKYLNEIKPPIIHYDLKPGNILLVNGTACGEIKITDFGLS KIMDDDSYNSVDGMELTSGAGTYWYLPPECFVVGKEPPKISNK VDVVSVGVIFYQCLYGRKPPFGHNQSQDDILQENTILKATEVQFP PKPVVTPEAKAFIRRCCLAYRKEDRIDVQQLACDPYLLPHIRKSV STSSPAGAAIASTSGASNSSSN |
| 5996 | 1612 | 981 | DQOACLLGLMLTLEFGILEFDPFSWIGSWTQR/SWVSWSRSPGCE LFSIVVFGSIVNEGYNLSASEGEEFCIYNRNPNACSYGVAVGVL AFLTCLLYLALDVYFPQISSVKDRKK\AVLSGHPVVSQEPHPAA FWAFLWFTGDSCL\ANQWQVSKPKDNPLNEGTDASGRPSPPFS FFSIFTWLTAAALAVRRFKDLSFQEEYSTLFP\ASAP |
| 5997 | 1612 | 981 | DQOACLLGLMLTLEFGILEFDPFSWIGSWTQR/SWVSWSRSPGCE LFSIVVFGSIVNEGYNLSASEGEEFCIYNRNPNACSYGVAVGVL AFLTCLLYLALDVYFPQISSVKDRKK\AVLSGHPVVSQEPHPAA FWAFLWFTGDSCL\ANQWQVSKPKDNPLNEGTDASGRPSPPFS FFSIFTWLTAAALAVRRFKDLSFQEEYSTLFP\ASAP |
| 5998 | 1612 | 981 | DQOACLLGLMLTLEFGILEFDPFSWIGSWTQR/SWVSWSRSPGCE LFSIVVFGSIVNEGYNLSASEGEEFCIYNRNPNACSYGVAVGVL AFLTCLLYLALDVYFPQISSVKDRKK\AVLSGHPVVSQEPHPAA FWAFLWFTGDSCL\ANQWQVSKPKDNPLNEGTDASGRPSPPFS FFSIFTWLTAAALAVRRFKDLSFQEEYSTLFP\ASAP |
| 5999 | 2 | 1790 | RPFMEKARRGGDGVPRGVLHIVVVGFFHKKGCQVEFSYPLIP GDGHSHTLPPEWKYLPFLALPDGAHNYQEDTVFFHLPFRNGNG ATVFGISCYR\QIEAKALKVRQADITRETQKSVCLSKLPLYG LLQAKLQLI\THAYFEKDFSQISILKELYEHMNSSLGASLEGS QVYLGLSPRDLVLHFRHKLILFKLILLEKKLVFYISPVNKLGV ALMTVLSLFPGMIEHGLSDCSQYRPRKSMSEDDGGLQESNP CADD FVASTADVSHNTLGTIRKVMAGNHGEDAAMKTEPLFQVEDSS KGQEPNDINQYLKPPSRPSPDSSESDETLDPSVLEDPNLKERE QLGSDQTNLFFKDSVPSESLPITVQPOANTGQVVLIPGLISGLE EDQYGMPLAIFTKGYLCLPYMALQQHLLSDVTVRGFVAGATNI LFRQKHLSDAIVEVEEALIQIHDPKLKLLNPTTADLRFADLV VRHVTENRDDVFLDGTGWEWDEWIRAFVYIHALLAATLQLV LFRIVNVAKKIGNVMVT\SRNVVQTGK\AVGQSVGGAFS\SAK TA\MSSWLSFTTSTSQSLTEPPDEKP |
| 6000 | 101 | 1561 | TEPCRTAENCTATMSENKNSLESSLRQLKCHFTWNLMGENSL DDFEDKVFYRTEFQNRFEKATMCNLLAYLKHKGQNEAALECLR KABELIQEHADQAEIRSLVTWGNVAVVYHMGRLSDVQIYVDK VKHCEKFFSPYRIESPEDCEEGWTRLKCGGNQNERAKVCFEK ALEKKPKNPEFTSGLAIASVRLDNWPPSQNAIDPLRQAIRLNDP NQYLKVLALALKLHMKREEEGEEGEGEK\LVBEALEKAPG\VTDV LRSAA\KFYRGKDEPKAIELLKKALEYIP\NNAYLHCQIGCCY RAKVFQVMNLRNGMYGKRKLELIGHAVAHLLKKADEANDLFR VCSILASLHALADQYEDAEYFYQKEFSKELTPVAKQLHLRYGN POLYQMKCEDKAIHHFIEGVKINQKSREKMKDKLQKIAKMRL SKNGADSEALHVLAFLOELNEKMQQADEDSERGLESGSLIPAS SWNGE |
| 6001 | 176 | 1038 | APAHSPSRGHRTHIHTPRHTPRCTMAESHQSSSLITASQPFET WLHFDADGSGYLEGKELQNLQELQARKKAGLELSPMKTFVD QYQQRDDGKIGIVELAHVLPTEENFLLFRCCQLKSCE\EFMKT WRKYDTHSGFIETELKNFLKDLLEKANKTVDDTKLAEYTDLM |

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|------------|--|--|---|
| | | | LKLFDSNNNDGKLELTEMARLLFPQENFLKPGIKMCGKEFNKA FELYDQDNGYIDENELDALLKDLCEKNKQDLINNITTYKNI MALSDGGKLYRTDLALILCAGDN |
| 6002 | 977 | 81 | LAPFGGGLHIPPTPLSHSRPPPSHHAPHPSPPLPLPPADLHPS SMAQRSDLLLEDCQLTRDRVVVSHDENLCRQSGLNDRDVGSLDF EDLPLYKEKLEVYFSPGHEFHGSDRRMVRLEDLFQRFPTPMSV EIKGKNEELIREQ/VLVRRYDRNEITIWASEKSSVMKKCKAANP EMPLSFTISRGFVLLSYLGLLPPFPIPEKFFCFPLPNIINRT YPPFSCSLNQLLAVVSKWLMRKSLIRHLBERGVQVFWCLNE ESDFFAAFSVGATGVITDPTALRHLYDNHGAARTS |
| 6003 | 140 | 4098 | GKLRFRGMRRLLICKRICDYKSFDDDEESVDGNRPSSAASAFKVP APKTSNGNPANSARKPGSAGGPKVGAGASKEGGAGAVDEDDFIKA FTDVPSIQIYSSRELEETLNKIREILSDDKHWDQRANALKKIR SLLVAGAAQYDCFFQHLRLLDGALKLSAKDLRSQVVRACITVA HLSTVLGNKFDHGAEAIVPTLFNLVPSNAKVMATSGCAAIRFII RHTHVPLIPLITSNCTSKSVVRRRSFEFLDLLQEWQTHSLE RHA AVL VETIKKGIHDADAERVEARKTYMGLRNHFPGEAETLY NSLEPSYQKSLQTYLKSSGSVASLPQSDRSSSSSQESLNRPFSS KNSTANPSTVAGRVSAAGSSKASSLPQSLQSRSDIDVNAAGAK AHHAAGQSVRSRGLGAGALNAGSYASLEDTSDKLDGTASEDGRV RAKLSAPLAGMGNADSRGRSRTKMVSQSQPSRSRSGSPGRVLT TTALSTVSSGVQVRLVNSASAQKRSKIPRSQGCSEASPSRLSV ARSSRI PRPSVSQGCSEASRESSRDTSPVRSFQPLASRHHRS TGALYAPEVYGASGPGYGISQSSRLSSSVSAMRVLTGSDVERA VADALLGD IRTKKKPARRRYESYGMHSDDDANSASSACRS YSSRNGSIPTYMRQT\EDV\AEVLNRCASSNWSERKEGLLGLQN LLKNQRTLSRVELKRLCEIFTRMFADPHGKRVFSMFLETLVDFI QVHKDDLQDLFVLLTQLLKKMGADLLGSVQAKVQKALDVRES FPNDLQFNILMRFTVDQTQTPSLKVKVAILKYIETLAKQMDPGD FINSETRLAVSRVITWTTEPKSSDVRKAAQSVLISLFEINTPE FMMLGALPKTFQDGATKLLHNHLRNTGNGTQSSMGSPLTRPTP RSPANWSSPLTSPNTSNTLSPSAFDYDTENMNSEDIYSSLRG VTEAIQNFSFRSQEDMNEPLKRDSSKDDGDSMCGGPG\MSDPRA GGDATDSSQTAL\DNKASLLHSMPTHSSPSRSDYNPNYSDSIS FPNKALKKEAMFDDADQFPDDLSDHSDLVARLLKELSNHNER VEERKIALYELMKLTQBSFSVWDEHFKTILLLETLGDKET IRALALKVLRILRHQPARFKNYAELTVMKTLAHLKDPHKEVVR SAEEAASV\LATS\I\SEPCIKVLCPIIQTADYPIINLAAIKMQT KQIERVSKETLNLNLLPEIMPGLIQGYDNSESSVRKACVFCVAV HAVIGDELKPHLSQLTGSKMKLLNLYIKRAQTGSGGADPTDVS GQS |
| 6004 | 140 | 4098 | GKLRFRGMRRLLICKRICDYKSFDDDEESVDGNRPSSAASAFKVP APKTSNGNPANSARKPGSAGGPKVGAGASKEGGAGAVDEDDFIKA FTDVPSIQIYSSRELEETLNKIREILSDDKHWDQRANALKKIR SLLVAGAAQYDCFFQHLRLLDGALKLSAKDLRSQVVRACITVA HLSTVLGNKFDHGAEAIVPTLFNLVPSNAKVMATSGCAAIRFII RHTHVPLIPLITSNCTSKSVVRRRSFEFLDLLQEWQTHSLE RHA AVL VETIKKGIHDADAERVEARKTYMGLRNHFPGEAETLY NSLEPSYQKSLQTYLKSSGSVASLPQSDRSSSSSQESLNRPFSS KNSTANPSTVAGRVSAAGSSKASSLPQSLQSRSDIDVNAAGAK AHHAAGQSVRSRGLGAGALNAGSYASLEDTSDKLDGTASEDGRV RAKLSAPLAGMGNADSRGRSRTKMVSQSQPSRSRSGSPGRVLT TTALSTVSSGVQVRLVNSASAQKRSKIPRSQGCSEASPSRLSV ARSSRI PRPSVSQGCSEASRESSRDTSPVRSFQPLASRHHRS TGALYAPEVYGASGPGYGISQSSRLSSSVSAMRVLTGSDVERA VADALLGD IRTKKKPARRRYESYGMHSDDDANSASSACRS YSSRNGSIPTYMRQT\EDV\AEVLNRCASSNWSERKEGLLGLQN LLKNQRTLSRVELKRLCEIFTRMFADPHGKRVFSMFLETLVDFI QVHKDDLQDLFVLLTQLLKKMGADLLGSVQAKVQKALDVRES FPNDLQFNILMRFTVDQTQTPSLKVKVAILKYIETLAKQMDPGD FINSETRLAVSRVITWTTEPKSSDVRKAAQSVLISLFEINTPE |

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|------------|--|--|--|
| | | | FTMLLGALPKTFQDQATKLLHNLHRLNTGNGTQSSMGSPILTRPTP RSPANWSSPLTPTNTSQNTLSPSAFDYDTENMNSDIYSSIRG VTEAIQNFSSFRSQEDMNEPLKRDSSKDDGDSMCGGPG\MSDFRA GGDATDSSQTAL\DNKASLLHSMPTHTSSPRSRDYNPNYSDSIS PFNKSALEAMFDDADQFPDDLSLDHSDLVAEELLKELSNHNER VEERKIALYELMKLTQEESSFSVWDEHFKITLLLLLETLGDKPT IRALALKVLRILRHQPARFKNYAELTMKTL\EAHKDPHKEVVR SAEEAASV\LATSI\SPEQCIKVLCPITQTADYPINLAAIKMQT KVIERSKETLNLPLPEIMPGLIQGYDNESSVRKACVFCVLVAV HAVIGDELKPHLSQLTGSKMKLLNLYIKRAQTGSGGADPTTDS GQS |
| 6005 | 133 | 5955 | RSSGRRQEQQLGQFPGRERKGMASGLGSPSPCSAGSEEDMDALL NNSLPPPPHENEEDPEEDLSETETPKLKKKKPKKPRDPKIPKS KRQKERMMLLCRLQDSSGEGPEFVEEEVEALRSDSEGSYTP GKKKKKLLGPKKEKSKSKRKEEEEDDDDDDSKEPKSSAQLL EDWGMEDIDHVFSEEDYRTLTNYKAFSQFVRPLIAKNPKIAVS KMMMLGAKWREFSTNNPFGSSGASVAAAAAVALVESMVT TEVAPPPPPVEVPYRKAKTKEGKGNARRKPKGSPRVDAKKPK PKKVAPLKIKLGGFGSKRRSSSEDDDLVESDFDDASINSYSV SDGSTSRSSRSRKKLRTTKKKKKGEEVTAVDGYETDHDQYCEV CQQGGEIILCDTCPRAYHMCVCLDPDMEKAPGKWSCHPCEKEGI QWEAKENDSEGEIILEEVGGDLSEEDDHMEFCRVCKDGGELL CDTCSSSYHILCLNPLPEIPNGEWLCPRCTCPALKGKVQKILI WKWGQPPSPPTPVPRPPDADPNTSPSPKPLEGRPERQFFVKWQMS YWHCSWVSELQLELHC\QVMFRNYQRKNDMEPPSGDFGGDEEK S\RRKKNKDPKFAEMEERFYRYGKPEW\MMIHRILNHSVDKKG HVHYLIKWRDLPYDQASWESEDEIQQDYDLFKQSYWNHRELMRG EBGRPGKCKLKVKLRLKLERPETPTVDPVTKYERQPEYLDATGG TLHPYQMEGLNWLRFSAQGTDTILADEMGLKTVQTAFLYSL YKEGHSKGPFLVSAPLSTIIN\WEREFEMWAPDMYV\VTYVGD DSRAIIRENEFS\FEDNAIRGGKKASRMKKEASVKFVLLTSYE LITIDMAILGSIWACLIVDEAHLKNNQSKFFRVNLGYSLOHK LLLTGTPLQNNLEELFHLNFLTPTFRFHNLEGFLEEFADIAKED QKKLHDMGL\PHMLRLKADVFKNMPSKTELIV\RVLSLPM\Q KKYYK\YILHSKFLKALN\ARGGGNQVSLNVMDLKKCCNHPY LFPVAAMEAPKMPNGMYDGSALIRASGKLLQLKMLKNLKEGGH RVLI FSQMTKMLDLEDFLEHEGYKYERIDGGITGNMRQEAIDR FNAPGAQQFCFLSTRAGGLGINLATADTVIYDSWNPNDIQ AFSRAHRIGQNKVMYIRFVTRASVEERITQVAKKMMMLTHLV RPGLSKTGSMKQELDDILKFGTEELFKDEATDGGGDNKEGED SSVIHYDDKAIERLLDRNQDETEDELQGMNEYLSSFKVAQYVV REBEEMGEEEVEREIIKQEEVDFDYWEKLLRHHEQQQEDLAR NLGKGKRIKQVNYNDGSSQEDRDWQDDQSDNQSDYSVASEEGDE DFDERSEAPRRPSRKGLRNDKDKPLPPLARVGGNIEVLGFNAR QRKAFILNAINRYGMPQDAFTTQWLVRDLRGKSEKFKAYVSLF MRHLCEPGADGAETFADGVPREGLSRQHVLTIRIGVMSLIRKKVQ EFHVNGRWSMPELAEVEENKMSQPGSPSPKTPPTSTPGDTQP NTPAPVPPAEDGIKIEENSKEEESIEGEKEVKSTAPETAICT QAPAPASEDEKVVVEPPEGEEKVEKAEVKERTEEPMEPEPKGK AADVEKVEEKSAIDLTPIVVEDKEEKEEKEEKEVMLQNGETPK DLNDEKQKKNIKQRFMFNIADGGFTLHSLWQNEERAATVTKKT YEIWHRRHDYWLLAGIINHGYARWQDIQNDPRYAILNEPFGEM NRGNFLEIKNKFLARRFKLLEQALVIEEQLRRAAYLNMSSEDPH PSMALNTRFAEVECLAESHQHLKESMAGNKPANAVLHKVLKQL EELLSDMKADVTRLPATARIIPPAVRLQMSERNILSRANRAP EPTPQQVAQQQ |
| 6006 | 1 | 965 | DNDFLRNTVHRHEPPVTAEPILRLAENEDVVVVVDKPSIPVPHC GRFRHNTVI FILGKEHQLKELHPLHRLDRLTSGVLMFAKTAAS ERIHEQVRDRQLEKEYVCRVEGEFPTEVETCKEPILVVSYKGV CRVDFRGKPCETVFQRLSYNGSSVVRCPRLTGRTHQIRVHLQF LGHPILNDPIYNSVAVGFSRGRGGYIPKTNEELLRLDLVAHQAK |

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|------------|--|--|--|
| | | | QSLDVLDCGDLSPGLTSTAPSSSELGKDDLEELAAAA\QKME EVAEAPQELDTIALASEKAVETDVMNQ\RQT\TLCRVPAGATG SLAPRPCDVPTCTTL |
| 6007 | 3 | 2351 | HELGOVEYVFTDKTGTLTENEMQFRECSINGMKYQEINGRLVPE GPTPDSSEGNLSYLSLNLNLSHLTSSSFRTSPNETELIK EHDLPFKAVSLCHTVQINNVTCTDCTGDGPWQSNLAPSQLEYYS SPDEKALVEAAARIGIVFIGNSEETMEVKTGLKLERYLHLILE PDSRRRMSVIVQAPSGEKLPAKGAESSILPKCIGGEIEKTRI HVDEFALKGLRTLCIAYRKFTSKEYEEDKRIFEARTALQQR\B EKLAAVFQFIEKDLILLGATAVEDRLQDKVRETTEALRMAGIKV WVLTDGKHETAVSVLSLSCGHFRTMNIELINQKSDSECAEQLR QLARRITEDHVIQHGLVVDGTSLSLALREHEKLFMEVCRNCSAV LCCRMAPLQKAKVIRLIKISPEKPI TLAVGDGANDVSMIQEAHV GIGIMGKEGRQAARNSDYAIARFKFLSKLLFVGHGFYIRIATL VQYFFYKNVCFITPQFLYQFYCLFSQQTLYDSVYLTLY\NICFT SLPILYISLLEQHVDPHVLQNKPTLYRDISKNRLLSIKTFLYWT ILGFSAFIPFFGSYLLIGKDTSLGNGQMFGNWTFTGLVFTVM VITVTVMALETHFWTWINHLVTWGSIIFYFVFSLFYGGILWPF LGSQNMVFFVFIQLSSGSWFAIILMVVTCFLFDIIRKVFDRHL HPTSTEAQLTETNAGIKCLDSMCCFPGEAACASVGRMLERVI GRCSPTHISRWSASDPFYTNDRSILTLSTMDSSTC |
| 6008 | 4554 | 1089 | AGVRRAGARRGPGRALPAGATAVPPPSARRRRRCPAPEHAGPAR ASRPQSETMFQLPVNNLGSRLKARKTVKKILSDIGLEYCKEHI DFKQFEPNDFYLNKTTWEDVGLWDPSTKNQDYRTKPFCCSACP FSSKFPSAYKSHFRNVHSEDFENRILLNCPYCTFNADKKLTETH IKIFHAPNASAPSSSLSTFKDKNKNDGLKPKQADSVEQAVYYCK KCTYRDPLEYIVRKHIYREHFQHVAAPIAKAGEKSLNGAVPLG SNARESSIHCKRCLFMPKSYEALVQHVIEDHERIGYQVTAMIG HINVVVFRSKPLMLIAPKPKDKKSMGLPPRIGSLASGNV\RLSP SQQMVNRLSIPKPNLNTGVNMSSVHLQNNYGVKSVGGYSV GQSMRLGLGGNAPVSIPOQSQSVKQLLPSGNGRSYGLGSEQRSQ APARYSLQSANASSLSGQLKSPSLSQSQASRVLQSSSSKPA ATGPPPGNTSSQKWKICTICNELFPENYVSVHFEKEHKAEP AVANYIMKIHNFSTSKCLYCNRYLPTDTLLNHLIHGLSCPYCRS TFNDVEKMAAHMRMVHIDEBMGPKTDSTLSFDLTLOQSSHTNIH LLVTYTNLRDAPAESVAYHAQNNPPVPPKQPKVQEKADIPVKS SPQAAVFPYKDVGTCLCPLCFSILKGPISDALAHHLRERHQVIO TVHPVEKKITYKCIHCLGVYTSNMSTASTITLHLVHCRGVGKTQN GQDKTNAPSRLNQSPSLAPVKRTYEQMEFLLKKRKLDDSDSP SFFEEKPEEPVVLALDPKGH\EDDSYEARKSFLT\KYFT\KQPY TRREIEKLAASLWV\WK\SDIASHFSNKRKKCVRDCEKYKPGVL LGFNMKELNKVKHENDFPAEGLFENHDEKDSRVNASKTADKKLN LGKEDSSSDSFENLEESNESGSPFDPVFEVEPKISNDNPFEH VLKVIPEDASESEKLDQKEDGSKYETIHLTEFTKLMHNASDS EVDQDDVVEWKDGASPSSESGPSQVSDFEDNTCEMKPGTWSDE SSQSEDARSSKPAKKKATMQDREQLKWKQSSYGVKVEGFWSKD QSQWQNASENDERLSNPQIEWQNSTIDSEDEGEQFDNMTDGAEP MHGSLAGVILSSQA |
| 6009 | 4272 | 1534 | CHGLQHLTPFRENLNLSLQGE*EPH*AA*QAVRSEKKSIC*GSPSC HLVLGVLVFPVARQSSHSAGPAQSAFR*GTGSGTPKAAEQSGYW EAYTLGHQHWNMFPPIQRPPLVMKGRIMCGKCEKG*VSDSVTG RAVAGEQASQRRTVFTAGGGEC LGAKSVRASVFTGNQPGVMGLL NGKRGCGCFBSGYLFGFIVIGKIQSLEAKVPLPVNGQTGERASPG NCRIHIVDAVC*SEHH*DHFLAAFLNSTIIS*VAPGSWQDHA VLQKEVQASVRCRGFESVDTAPAGFWAHSPPGLQGEPTTTSVSL FVLAPODGEVFPFVEGQLVTVLGLVVPQSIHRTFVHHTQLFLHP I*KLALDVAFLHLLTLVCSFNVAYG*GKNGGTTLHQLFAEVN AVTRGSAVQRRPSITISSIHVDTKIQQELHDMVAGADGVVQWG DPFVVLGAGIFHLIDDELHQIELSFQRRV*EQCGVKPDSQVFP RPLRVGLLQVGPLVRGGRRVAGRGKRCWRDLFFPWRWGLSHRT RDLLRGGDRGHVVVIVLCRLGSLVGGGLTDELLWFGR*LIIG |

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|------------|--|--|---|
| | | | I**RGRLSGEWGCGLGRGELFQVSIIGTGVSIHVIGQGDEHVLGG AGLVERGALHATGQGVEALVQQLLDVGPACALGLCDGAALFQGP GRVGQLPAEGLQVCITLVAQWRMDGRELGGAEWPQALHGAAI CGVGAILLKALSQYFLKGG*RLWCARGQ*PVKKRQRRWRG*TR R*NGLTTHCFN*LI*GAVCCRLVILRWCGLLEVHGVYGT*IHCL GSFPGRLWP*PFISQERPNGHCQWEFLAVPSWKCRWSRWRVSG TWRYGNPLLL*GAWLGGACGGQGGGFLSTWQACTGPGQAAP LPPFQGACRPRTQRCRTWVCPIAWRQLLAYTRD |
| 6010 | 1 | 3533 | IMPCGSSRLRGCTWHPNEFVSDLSYFDCIESVMENSKVLGESM AGISQNAKTGDLPAFGCECVGIASKALCSLTEAAQAAYLVGIFD PNSQAGHQGLVDP IQFARANQAIQMACQNLVDPGSSPSQVLSAA TIVAKHTSALCNACRIASSKTANPVAKRHVQSAKEVANSTANL VKTIKALDGDSEDNRNKCRITAPLIEAVENLTAFASNPEFVS IPAQISSEGSQAQEPILVSAKPMLESSSYLIRTARSLAINPKDP PTWSVLAGHSHTVSDSIKSLITSIRDKAPGQRECDYSIDGINRC IRDIEQASLAASVQSLATRDDISVEALQEQLTSVVQEIIGHLIDP IATAARGEAAQOLGHKGTQLASYFEPLILAAGVASKILDHQQM TVLDQTKTLAESALQMLYAAKEGGGNPKAQHTHDAITEAAQLMK EAVDDIMVTINFAASEVGLVGMVDAIAEAMSKLDEGTPPEPKG TFVDYQTTVVKYKAIAVTAQEMMTKSVTNPEELGGLASQMTSD YGHAFQGGMAAATAEPEEIGFQIRTRVQDLGHGCIPLVQKAG ALQVCPTDSYTKRELIECARAVTEKSVLVLALQAGNKGTOACI TAATAVSGIADLDTTIFATAGTLNAENSETFADHRENILKTA KALVEDTKLLVSGAASPDKLAQAQSSAATITQLAEVVKLGAA SLGSDDPETQVVLINAIKDVAKALSDLSATKGAASKPVDDPSM YOLKGAAKVMVTNVTSLKTKVAVEDEATRGTRALEATIEICIQ ELTVFQSKDVPEKTSPPESIRMTKGITMATAKAVAAGNSCROE DVIATANLSRKAVSDMLTACKQASPHPDVSDVTRALRFGTEC TLGYLDLLEHVVLQKPTPELKQQLAAFSKRVRAGAVTELIQAA EAMKGTWVDPEDPTVIAETELLGAAASIEAAKKLEQLKPRAK PKQADETLDPFEEQILEAAKSIAAATSALVKSASAAQRELVAQK VGSIPANAADDGQWSQGLISAARMVAAATSSLC EAANASVQGH SEBKLISSAKQVAASTAQLLVACKVKADQDSEAMRRLQAAGNAV KRASDNLVRAAQKAAFGKADDDVVVKTKFVGGIAQITAAQEEM LKRELELEEARKKLAQIRQQYKFLPTELEDEG |
| 6011 | 445 | 1835 | LLQPAMRKSPGLSDCLWAWILLSTLTGRSYGQPSLQDELKDN TVFTRILDRLLDGYDNRLRPLGERVTEVKTIDFVTSFGPVSDF DMEYTIIDVFRQSWKDERLKPKGPMTVLRLNLMASKIWTDPDF FHNGKKSVAHNMTMPNKLRLITEDGTLTYMRLTVR\AECPMF GRDFPM\D\AHACPLKFGSYAYTRAEVVEWTRPARSVVVAED GSRNLQYDLLGQTVDSGIVQSSSTGEYVVMTHFHLKRIKGYFVI QTYLPCIMTVILSQVSFWLNRESVPARTVFGVTVTLTMTTSLIS ARNSLPKVAYATAMDWFIAVCYAFVFSALIEFATVNYFTKRGYA WDGKSVVPEKPKVKDPLIKKNNTYAPTATSYTPNLARGDPGLA TIAKSATIEPEKVKPETKPPPEPKKTFNSVSKIDRLSRIAPPLLF GIFNLVYWATYLNREPQLKAPTPHQ |
| 6012 | 351 | 5013 | PAELFQSFAIWHKELYDWRLGPNWQCQPVISKSLKPLECIRGE EGIQVREIACIQKDKDIPAEDIICEYFEPKPLLEQAQLIPCCQD CIVSEFSAWSECKTCGSGQLHRTRHVVPQFGSGCPNLTEF QVCQSSPCEAEELRYSLVHVGWSTCSMPHSRQVRQARRRGKNKE REKDRSGVKDPEARELIKKKRNRNRQNRQENKYWDIQIGYQTR EVMCINKTGKAADLSFCQKEKLPMTFQSCVITKECQVSEWSWS PCSKTCHDMVSPAGTRVTRTRIQFPISGEKECEPEFEEKEPCLS QGDGVPCATYGWRTTEWTECRVDPILLSQDQKRRGNQALCGGG IQTREVVYCVQANENLLSQLSTHKNKEASKPMDLKLCTGPIPNNT QLCHIPCPTCEVSPWSAWGPCTYENCNDQGGKKGFKLRKRIT NEPTGGSGVTGNCPHLLTAIPCEEPACYDNKAVRLGDCBPDNKG ECGPGTQVQEVVVCINSDEGEVDRLCRDAIFPIPVACDAPCPKD CVLSTWSTWSSCSHTCSGKTTEGKQIRARSILAYAGEBGRCP NSSALQEVRSNEHPCTVYHWQTPGWGQCIEDTSVSSPNTTTTW NGEASCSVMQTRKVICVRVNVGVQVGPCKCPESLRPETVRPCLL |

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|------------|--|--|---|
| | | | PCKKDCIVTPYSDWTSCPS\SCKEGDSSIRKQSRHRVIIQLPAN GGRDCTDPLYEEKACEAPQACQSYRW\KTHKW\HRCQ\LVP\WS VQQDSP\GAQEGCGPGRQARAITCRKQDGGQAGIHECLQYAGPV PALTOACQIPCDQDDCQLTSWSKFSSCNGDCGAVRTRKRTLVGKS KKKEKCKNSHLYPLIETQYCPCKYNAQPVGNWSDCILPEGKVE VLLGMKVQGDIKECGQGYRYQAMACYDQNGRLVETSRCSNHHYI EEACII PCPSDCKLSEWSNWSRCSKSGSGVKVRSKWLREKPN GGRPCPKLDHVNQAQVYEVVPCSDCNQYLWVTEPWSICKVTFV NMRENCGEVQTRKVRMCQNTADGPSEHVEDYLCDEEMPLGSR VCKLPCEPCVISEWGPWTQCVLPCNQSSFRQRSADPIRQPADE GRSCPNAVEKEPCNLNKNKYHYDYNVTDWSTCQLSEKAVCGNGI KTRMLDCVRS DGKSVDLKYCEALGLEKNWQMTSCMVECPVNCQ LSDWSPWSECSQTCGLTGKMIIRRTVTQPFQDGRPCPSLMDQS KPCPVKPCYRWQYQWSPCQVQEAQCGEGTRTRNISCVVSDGSA DDFSKVVDREFCADIELIIDGNKNMVLBESCSQPCPGDCYLKDW SSWSLCQLTCVNGEDLGGGQIVRSRPVIIQELNQHLCPEQML ETKSCYDGGCYEYKMMASAWKSSRTVWCQSDGINVTGGCLVM SQPDADRSCNPPCSQPHSYCSETKTCHCEGYTEVMSNSNTLEQ CTLIPVVVLPMTMEDKRGDVKTSRAVHPTQSSNPAGRGRTWFLQ PFGPDGRLKTWVYGVAAGAFVLLIFIVSMIYLACKPKPKPQRRQ NNRLKPLTLAYDGDADM |
| 6013 | 1161 | 710 | GAFIAGVFVQPVLIIRYPNSLDTTSWAWRGPGVLKVLWLTASQPC SIYDVEFLPVYHPSPEESRDPTLYANNVQRMVAQALGIPATECE FVGS LPVIVVGRLLKVALEPQL/WGTGKSASEGWAVRWLCGRWGR ARPESNDQPGRVCAATAL |
| 6014 | 2857 | 613 | EAVAGGMEKSRMNLFKGPDITLCFDKDEFMKEDFDVDHFVSDCRK RVQLEELRDDLELYVKKLKTAMVELINKOYADF\VNLSSTNLVGM DKALNQLSVPLGQLREEVLSLRSSVSSEIRAVDERMSKQEDIRK KKMCVLRLLIQVIRSVEKIEKILNSQSSKETSALAEASSPLLTGQI LERIATEFNQLQFHACQSK\GMPLLDKVRPRIAGITAMLQQSLE GLLLEGLQTSVDVIIRHCLRTYATIDKTRDAEALVGQVLVKPYI DEVIIIEQFVESHPNGLQVMYKLEFVPHHCRLLREVTGGAISS EKNTVPGYDFLVNSVWPQIVQGLEEKLPSEFNPNPDAPHEKY TISMDVRRRLERQCGSQASVKRLRAHPAYHSFNKKWNLPVYFQI RFREIAGSLEAALTVDLEDAPAESPYCLLASHRTWSSSLRCWSD EMFLPLLVRHLWRLHSGRFWARYSVFV\N\ELSLRPISNESPK IKKPLVTGSKEPSITQGNTEQSGSPSETKPVVSISRTQLVYV ADLDKLQEQLELLEIIKPKLEMIGFKNFSSISALEDSSQSSFS ACVPSLSKKIIQDLSDCPGFLKSALEVPRLYRRTNKEVPTTAS SYVDSALKPLFQLQSGHKDKLQAI IQWLEGLTSESTHKYYET VSDVLNSVKKMEESLKRLLKQARKTTPANPVGPGSGMSDDDKIRL QLALDVEYLGEQIQKLGLQASDIKSFSALELVAAAKDQATAEQ P |
| 6015 | 13 | 2237 | AEGCAERRGTPEPVVELSMWSWESGAGPGLGSQGM DLVWSAWYGKC VKKGSLPLSAHGIVVAWLSRAEWDQVTYVLFCDHKLQRYALN RITVWRSRSGNELPLAVASTADLIRCKLLDVTGGLGTDELRLLY GMALVRFPVNLISERKTKFAKVLKCLAQEVNIPDWIVDLRHELT HKMPHINDCRRGCYFVLDWLQKTYWCRQLENSLRETWELEEFR EGIEEEDQEEEDKNIVDDIIEQKPEPQDDGKSTESDVKADGDSK GSEEVDSHCKKALSHKELYERARELLVSYYYEQFTVLEKFRYLP KAIKAWNPNPSPRVECVLAEKGVTCENREAVLDAFLDDGFLVPT FEQLAALQIEYEENVDLNDVLVPKPFQFQWPLLRLHSONFTQ ALLERMLSELPALGISGIRPTYILRWTVELIVANTKTGRNARRF SAGQWEARRGWRLFNCSASLDWPRMVESCLGSPCWASPQLLR I I F\KAMGQGLQDE\EQEKLLRICSIYQSGENSLVQEGSEASPTG KSPYTLDSLYWSVKPASSSFGSEAKAQQEEQGSVNDVKEEKE EKEVLPDQVEEEENDDQEEEEEDEDEDEDEDEDRMEVGPFTST QESPTAENARLLAQKRGALQGSAAQVSSSEDVRWDTFF\LGRMPR SRPRTPAELMLENYDTHVIFWTKPVL\EQLEPSTCK\TDTLGL \SCGVGS\GNCNSSSSSNFRGAFLLBARGSLH\GL\KTGLQLF |
| 6016 | 13 | 2237 | AEGCAERRGTPEPVVELSMWSWESGAGPGLGSQGM DLVWSAWYGKC |

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|------------|--|--|--|
| | | | VKGKGSPLSAHGIVVAWLSRAEWDQVTVYLFCDDHKLQRYALN RITVWRSRSGNELPLAVASTADLIRCKLLDVTGGGLGTDELRLLY GMALVRFVNLISERKTKFAKVPKCLAQEVNIPDWIVDLRHELT HKKMPHINDCRRGCYFVLDWLQKTYWCRQLENSLRETWELEEF EGIEEDQEEDKNIVVDDITEQKPEPQDDGKSTESDVKADGDSK GSSEVDSHCKKALSHKELYERARELLVSEEEQFTVLEKFRYLP KAIKAWNPNPSRVECVLAELKGVTCENREAVLDAFLDDGFLVPT FEQLAALQIEYEENVLDNDVLVPKPFSQFWQPLLRLGHSQNFTQ ALLERMLSELPALGISGIREPTYILRWTVELIVANTKTGRNARRF SAGQWEARRGWRLFNCSASLDWPRMVESCLGSPCWASPQLLRII F/KAMGQQLQDE/EQEKLLRISCIYITQSGENSLVOEGSEASPIG KSPYTLDSLYSVKPASSSFGSEAKAQOEEQGSVNDVKEEKE EKEVLPDQVEEEENDDQEEDEDEDEDEDEDEMEVGPFFSTG QESPTAENARLLAQKRGALQGSAAQVSSDVRWDTFP/LGRMPR SRPRTPAELMLENYDTHVIEWTKPVL/EORLEPSTCK/TDTLGL /SCGVGS/GNCSNSSSSNFRGAFLLAARGSLH/GL/KTGLQLF |
| 6017 | 203 | 3469 | SHQETEQNSAMAPRKRGGRGISPIFCCFRNNDHPEITYRLRND NFAQLTMEPALPMPVEELDVMSSELVDELDTDKHREAMFALP AEKKWQIYCSKKKQDEENKATSWPEFYIDQLNSMAARKSLAL EKEEBERSKTIESLKTALRTKPMRFVTRFIDDLGLSCILNPLK TMDYETSESRIHTSLIGCIKALMNSQGRAHVLAHSESINVIAQ SLSTENIKTKVAVLEILGAVCLVPGGHKKVLQAMLHYQKYASER TRFQTLINDLDKSTGRYRDEVSLKTAIMSFINAVLSQAGVESL DFRLHLRYE/FLMLGIHPVMDKLRKHENSTLDRHLDFFEMLRNE DELEFAKRFELVHIDTKSATQMPFELTRKRLTHSEAYPHFMSILH HCLQMPYKRSNGTVQYWLDDRIIQQIVIQNDKGQDDSTPLEN FNIKVVVRLMVNENVKQWKEQAKMRKEHNELOQKLEKKEREC DAKTQEEEMQTLNKKMEKLEKETTEHKQVQKQVADLTAQLHE LSRRAVCASIPGCPSPGAPGGPFSSVPGSLPPPPPPPLPGGM LPPPPPLPPGGPPPPPGPPPLGAIMPPPGAPMGLALKKKSIPQ PTNALKSFNWSKLPENKLEGTVWTEIDDTKVKILDLDELERTF SAYORQDDFFVNSNSKQKEADAIDDTLSSKLKVKELSVIDGRR QNCNILLSRLKLSNDEIKRAILTMDEQEDLPKDMLEQLLKFPVE KSDIDLLEEHKHELDMAKADRFLFEMSRINHYYQRLQSLYFKK KFAERVAEVKPKVEAIRSGSEEVFRSGALKQLEVVLAFGNTYNN KGQRGNAYGFKISSLNKIADTKSSIDKNITLLHYLITIVENKYP SVLNLNEELRDIPOAAKVNMTLDOKEISTLRSGLKAVETELEYQ KSQFPQPGDKFVSVSQFITVASFSFSDVEDLLAEAKDLFTKAV KHFGEEAGKIQPDFFGIFDQFLQAVSEAKQENENMRKKKEEEE RRARMEALQKEQREERERKMRKAKENSEESGEFFDLVSALRSGEV FDDLSKLKRNKRITNQMTDSSRERPITKLN |
| 6018 | 13 | 2510 | TISQSGGIRRRREAVWFEVVMDFSRLLHMYSPQCVPENTGYTY ALSSSYSSDALDFETEHKLDPVFDSRMSRSLRLATTACTLGD GEAVGADSGTSSAVSLKNRAARTTKQRSTNKSASF SINHVSRQV TSSGVSYGGTVSLQDAVTRPPVLDESIREQTTVDHFWGLDD GDLKGGNKAATQGGNDVGAGAAATGHNGFFCSNCSNMLSEKDVLT AHPAAGPVSVSRDRNQKDDCKGKRHLDAHPGRAGTLWHIW ACAGYFLLQLLRRIGAVGQAVSRTAWSALWAVAPGKAASGVF WWLGIGWYQFVTLISWLVFLLTRCLRNICKFLVLLIPLFLLLG LSLRGQG/NFFSFLPVLNWSMHRTQRVDDPDQVFKPTTSRLKQ PLQGDSEAFPHWMSGVEQQVASLSGQCHHHGENLRELTLLQK LQARVDQMEGGAAGPSASVRDVGQPRETDFMAFHQHEVRMS HLEDILGKLEKSEAIQKLEQTKQKTI SAVGEQLLPVTEHLQL ELDQLKSELSSWRHVKTGCETVDAVQERVDQVREMVKLLFS QGGSLBQLLQRFSSQFVSKGDLQTMRLDLQLQLLRNVTHVSV TXQLPTSEAVVSAVSEAGASGITEAQAIAVNSALKLYSQDKTG MVDFALES GGGSILSTRCSETYETKTALMSLFGIPLWYFSQSPR VVIQPDIIYPGNCWAFKGSQGYLVVRLSMMIHAAFTLEHI PKTL SPTGNISSAPKDFAVYGHENEYQREGQLLQGYTYDQDGESLQMF QALKRPDDTAQIVELRIFSNWGHPEYTCLYRFRVHGEPPVK |
| 6019 | 2 | 1066 | TPNDREPPQRPSSRRASHLAQEITSASALGDQQTQILGSLTTA |

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|------------|--|--|---|
| | | | PVITSAIRSMPISSQILTNAQQQVIGTLPVWVNSASVAAPAPA QSLQVQVATPQLLLNAQQQVIATLASSFLPPVAVRK\PTSPES LLKSEVQPIKPTPTVPQPAVVIASPAAPAKPSASAPIPTCSET PTVSGLVSKPHPTPSLDEEDGINLEEIREFAKNFKIRRLSLGLTQT QVGOALTATEGPAYSAICRFEKLDITPKSAQKLKPVLEKWL N EALERNQEGQQNLMEFVGGEPSKKRRRTSFTPAIEALNAYFE KNPLPTGQBITEIAKELNVDREVVRVWFCNRRQTLKNTSKLNVP QIP |
| 6020 | 4953 | 549 | EAIQFEVSIIGNYGNKFDTTCKPLASTTQYSAVFDGNYYYLPLW AHTKPVVTLTSYWEDISHRLDAVNNTLLAMAERLQTNIEALKSGI QGKIPANQLAELWLKLIDEVIEDTRYTLPLTEGKANVTVLDTQI RKLRSRSLSQIHEAAVRMRSEATDVKSTLAEIEDWLDKLMQLTE EPQNSMPDIIIMWIRGEKRLAYARI PAHQVLYSTSGENASGKYC GKTQTI FLKYPQEKNNNGPKVPVELRVNIWLGLSAVEKKFNSPA E GTFTVFAEMYENQALMFGKWGTSGLVGRHKFS DVTGKI KLKREF FLPPKGWEGEWIVDPERSLLTEADAGHTEFTDEVYQNESRYP GGDWKP AEDTYTDANGDKAASPSELTCPPGWEWEDDAWSYDINR AVDEKGWEYGITIPPDHKKPSWVAEKMVHTHRRRLVRKRKDD LTQTASSTAGAMEELQDQEGWEYASLIGWKPHWKQRSSDTFRRR RWRKMAPSETHGAAAI FKLEGALGADTTEDGDEKSLEKQKHS A TTVFGANTPIVSCNFD RDYIYHLRCYVYQARNLLALDKDSFSDP YAHICFLHRSKTTEIIHSTLNP TDQTII FDEVEIYGEPTVLQ NPPKVI MELFDNDQVGKDEFLGRSIFSPVVKLNSEMDITPKLLW HPVMNGDKACGDVLTAEILIRGKDGSNLP ILPPQRAPNLYMVP QGIRPVVQLTAIEILAWGLRNMKNFQMASITSPSLVVECGGERV ESUVIKNLKKTNPFPSSVLFMKVFLPKEELYMPLVIKVIDHRQ FGRKPVVGQCTIERLDRFRCDPYAGKEDIVPQLKASLLSAPPCR DIVIEMEDTKPLLASKCLSSMSTALS KMASPATVHLTEKEERIV DWNSKFYASSGEHEKCGQYIQKGYSKLKTYNCELENVAFEGHLT DFDSTFKLYRGKSDENEDPSVVGFEFGKSFRIYPLPDDPSVPAPP RQFREL PDSVPQECTVRIYIVRGLELPQDNNGLCDPYIKITLG KKVIE\DRDHYI\PNLTNPVFGRMVELSCYL PQEKDLKISVYD TD TFRDEKVGETI IDLENPF\LSRFG\SHCG\IPEEYCVSGVNTW RDSLR\PTQ\LLQNVARFKGFPQPILEDGSRIRYGGRDYSLDE FEANKILHQHLGAPEERLALHILRTQGLVPEHVETRTLHSTFPQ NIS\RYLRLVIWNTKDVILDEKSITGEEMSDIYVKGWIPGNEE NKQKTDVHYRSLDGEENFNWRVFPFDYLP AEQLCIVAKKEHFWS IDQTEFRIPFR\LIQIW\DNDFKS\DDYLGFPRTLTCRHTI HFLQKSPGGNC/RGLDMIPDLKAMNPLKAKTASLFEQKSMKGWW PCYAEKDGARVMAGKVEMTLEILNEKEADERPAGKGRDEFNMNP KLDLPNRPETSEFLWFTNPKCTMKFIVWRRFKWVIIGLLFLILL L FVAVLLYSLEPNYLSMKIVKPNV |
| 6021 | 4953 | 549 | EAIQFEVSIIGNYGNKFDTTCKPLASTTQYSAVFDGNYYYLPLW AHTKPVVTLTSYWEDISHRLDAVNNTLLAMAERLQTNIEALKSGI QGKIPANQLAELWLKLIDEVIEDTRYTLPLTEGKANVTVLDTQI RKLRSRSLSQIHEAAVRMRSEATDVKSTLAEIEDWLDKLMQLTE EPQNSMPDIIIMWIRGEKRLAYARI PAHQVLYSTSGENASGKYC GKTQTI FLKYPQEKNNNGPKVPVELRVNIWLGLSAVEKKFNSPA E GTFTVFAEMYENQALMFGKWGTSGLVGRHKFS DVTGKI KLKREF FLPPKGWEGEWIVDPERSLLTEADAGHTEFTDEVYQNESRYP GGDWKP AEDTYTDANGDKAASPSELTCPPGWEWEDDAWSYDINR AVDEKGWEYGITIPPDHKKPSWVAEKMVHTHRRRLVRKRKDD LTQTASSTAGAMEELQDQEGWEYASLIGWKPHWKQRSSDTFRRR RWRKMAPSETHGAAAI FKLEGALGADTTEDGDEKSLEKQKHS A TTVFGANTPIVSCNFD RDYIYHLRCYVYQARNLLALDKDSFSDP YAHICFLHRSKTTEIIHSTLNP TDQTII FDEVEIYGEPTVLQ NPPKVI MELFDNDQVGKDEFLGRSIFSPVVKLNSEMDITPKLLW HPVMNGDKACGDVLTAEILIRGKDGSNLP ILPPQRAPNLYMVP QGIRPVVQLTAIEILAWGLRNMKNFQMASITSPSLVVECGGERV ESUVIKNLKKTNPFPSSVLFMKVFLPKEELYMPLVIKVIDHRQ FGRKPVVGQCTIERLDRFRCDPYAGKEDIVPQLKASLLSAPPCR |

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|------------|--|--|--|
| | | | <p>DIVIEMEDTKPLLASKCLSSMSTALSKMASPATVHLTEKEEIV DWNSKFYASSGEHEKCGQYIQGYSKLKIYNCELENVAEFGELT DFSDTFKLYRGKSDENEDPSVVGFEKGSFRIYPLDDPSVPAPP RQFRELPSVPOECTVRIYIVRGLELQPDNGLCDPYIKITLG KKVIE\DRDHYIPNTLNPVFGRMVELSCYLPQEKDLKISVYDYD TFTREKVGGETIIDLENPF\LSRFG\SHCG\IPEEYCVSGVNTW RDSLR\PTQ\LLQNVARFKGFPQPILEDGSRIRYGGRDYSLDE FEANKILHQHLGAPEERLALHILRTQGLVPEHVETRTLHSTFQP NIS\RYYL RVIIWNTKDVLDEKSI TGEEMSDIYVKGWIPGNNEE NKQKTDVHYRSLDGEENFNWRVFPFDYLP AEQLCIVAKKEHFW SIDQTEFRIPPR\LIQIW\DNDFKS\LDYLGFPRTLTCRHTI HFLQKSPGGNC/RGLDMIPDLKAMNPLKAKTASLFEQKSMKGWW PCYAEKDGARVMAGKVEMTLEILNEKEADERPAGKGRDEPNMNP KLDLPNRPETSFLWFTNPCKTMKFIVWRRFKWVIIGLLFLLILL LFVAVLLYSLPNYLSMKIVKPNV</p> |
| 6022 | 4953 | 549 | <p>EAQFEVSIIGNYGNKFDTTCKPLASTTQVSRAVFDGNYYYLPLW AHTKPVVTLTSYWDI SHRLDAVNTLLAMAERLQTNIEALKSGI QGIIPANQLAEWLKLIIDEVIEDTRYTLPLTEGKANVTVLDTQI RKLRSRSLSQIHEAAVRMRSEATDVKSTLAEIEDWLDKLMQLTE EPQNSMPDIIIIWMIRGEKRLAYARIPAHQVLYSTGENASGKYC GKTQTIPLKYPQEKNNGPVPELVRVNIWGLSAVEKKFNSFAE GTFTVFAEMYENQALMEFGKNGTSGLVGRHKFS DVTGKIKLREF FLPPKGEWEWEGEIVDPERSLLTEADAGHTEFTDEVYQNSRYP GGDWKPAEDTYTDANGDKAASPSELTCPPGEWEDEDAWSYDINR AVDEKGWEYGITIPDPHKPSWVAABKMYHTRRRRLVRKRKXD LTQTASSTAGAMEELQDQEGWEYASLIGWKFWKQRSSDTFRRR RWRRKMAPSETHGAAAIKLEGALGADTTEDGDEKSLEKQKHA TTFVFGANTPIVSCNFRDRYIYHLRCYVYQARNLLALDKDSFSDP YAHICFLHRSKTTETIESTLNTPTWDTQIIIFDEVEIYGEFTVLQ NPPKVI MELFDNDQVGKDEFLGRSIFSPVVKLNSEMDITPKLLW HPVMNGDKACGDVLVTAEILIRGKDGSNLPILPPQAPNLYMVP QGIRPVVQLTAIEILAWGLRNMKNFMQASITSPSLVVECGGERV ESVVIKNLKKTPNFPSSVLFMKVFLPKBELYMPPLVIKVIDHRQ FGRKPVVGQCTIERLDRFRCDPYAGKEDI VPQKASLLSAPPCR DIVIEMEDTKPLLASKCLSSMSTALSKMASPATVHLTEKEEIV DWNSKFYASSGEHEKCGQYIQGYSKLKIYNCELENVAEFGELT DFSDTFKLYRGKSDENEDPSVVGFEKGSFRIYPLDDPSVPAPP RQFRELPSVPOECTVRIYIVRGLELQPDNGLCDPYIKITLG KKVIE\DRDHYIPNTLNPVFGRMVELSCYLPQEKDLKISVYDYD TFTREKVGGETIIDLENPF\LSRFG\SHCG\IPEEYCVSGVNTW RDSLR\PTQ\LLQNVARFKGFPQPILEDGSRIRYGGRDYSLDE FEANKILHQHLGAPEERLALHILRTQGLVPEHVETRTLHSTFQP NIS\RYYL RVIIWNTKDVLDEKSI TGEEMSDIYVKGWIPGNNEE NKQKTDVHYRSLDGEENFNWRVFPFDYLP AEQLCIVAKKEHFW SIDQTEFRIPPR\LIQIW\DNDFKS\LDYLGFPRTLTCRHTI HFLQKSPGGNC/RGLDMIPDLKAMNPLKAKTASLFEQKSMKGWW PCYAEKDGARVMAGKVEMTLEILNEKEADERPAGKGRDEPNMNP KLDLPNRPETSFLWFTNPCKTMKFIVWRRFKWVIIGLLFLLILL LFVAVLLYSLPNYLSMKIVKPNV</p> |
| 6023 | 102 | 916 | <p>SQELGMFVELNLLNTTPDRAEQKLTLLCDAKTGDSFLVHFL SFYLKANCKVCFVALIQSFSHYSIVGQKLGVSMTMARERQOLVF LEGL/IVCSGR\VFQAQKEFHPLOPLREANAGNLKPLFEFVREA LKPVDSEARWTPVLLVDDLSVLLSLGMGAVAVLDFIHYCRAT VCWELKGNMVLVHDSGDABDEENDILLNGLSHQSHLILRAEGL ATGFCRDVHGQLRIILWRRPSQPAVHRDQSFTYQYKIQDKSVSFF AKGMSPAVL</p> |
| 6024 | 3 | 3260 | <p>FLSFLCYPRFRCFLCLQFAIPASRMEQLNELELLMEKSPWEEAE LPAELFQKKVVASFPRTVLSTGMDNRYLVAVNTVQNKEGNCCK RLVITASQSLNKKELCILRNDWCSPVPEPGDIHLEGDCTSDTW IIDKDFGYLLIYPMLISGTSIASSIRCRRVAVLSETFRSSDPA TRQMLIGTVLHEVFQKAINNSFAPEKLOELAFQTIQEIIRHLKEM</p> |

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|------------|--|--|--|
| | | | YRLNLSQDEIKQEVEDYLFSECKWAGDFMHKNTSTDFPQMQLSL PSDNSKDNSTCNIEVVXPMDEESIWSPRFLGKGIKIDVTVGVI HRGYKTKYKIMPLELKTGKESNSIEHRSQVVLVYLLSQERRADP EAGLLLYLKTGMYPVPANHLDKRELKLRNQMAFSLFHRISKS ATRQKTQLASLPQIIIEEKTCKYCSQIGNCALYSRAVEQQMDCS SVPIVMLPKIEETQHLKQTHLEYFSLWCLMLTLESQSKDNKKN HONIWLMPASEMEKSGSCIGNLIRMEHVKIVCDGQYLHNFQCKH GAIPVTNLMAGDRVIVSGEERSLFLSRGYSVKEINMTTVTCLLD RNLVSVLPSTLFRDLQEEKNCIDITPLGNLSKLMENFVSKKLR DLIIDFREPOFISYLSVLPDADKDTVACILKGLNKPQRQAMKK VLLSKDYTLIVGMPGTGKTTICTLVRIYACGFSVLLTSYTHS AVDNILLKLAKFKIGPLRSR\QIQKVHPAIQQFTEHEICRSKSI KS\LALLEELYTSQLIDATTCMGINHPIFSRKIFDFCIVDEASQ ISQPICLGPLFFSRRFVLVDHQQLPPLVLRARALGMSSESLF KRLEQNKSAVVQTVQYRMNSKIMSLSNKLTYSKLECGSDKVA NAVINLRHFKDKVLEEFYADYSNPWLMGVFEFNNPVCFLNTD KVPAPQVEKGGVSNVTEAKLIVFLTSIFVKAGCSPSDIGIAP YRQQLKIINDLLARSIGMVEVNTVDKYQD\RDKSIVLVSVFRSN KDGTVGELLKDWRRINVAITRAKHLILLGCVPSLNCPPLEKL LNHLNSEKLIIDLPSREHESLCHILGDFQRE |
| 6025 | 3977 | 89 | GGFPAQSDHLPVFPFLRSDDLITMSTLVSPHPDAFFSLRALIA ARYGEAGEGPGWGAHPRIQLQPPPTSRTSFPFRLPALEQGGPG GLWVWGATAVAQLLWPAAGLGGPGSSRAAVLVQQWVSADTELIP AACGATLPALGRSSAQDPQAVLGALGRALSPLLEWLRHTYLA GEAPTADLAAVTALLLPFRYVLDPPARRIWNVTRWFVTCVRQ PEFRVLGEVVLVSARPLSHQPGPEAPALPKTAAQLKKEAKKR EKLEKFOQKQKIQQQQPPPEKKPKPEKREKRDPGVITYDLPTP PGEKDVSGPMPDSYSPRYVEAAWYPPWNEQQGFFKPEYGRPNVS AANPRGVFMCIIPPNVTGSLHLGHALTNAIQDSLTRWHMRGE TTLWNPGLDAGIATQVVVEKKLWREQGLSRHQLGREAPLQEVW KNKEBKGDRIYHQLKGLGSSLDWDRACFTMDPKLSAAVTEAFVR LHEEGIIYRSTRLVNWSCTLNSAISDIEVDKKELTGRITLSSVPG YKEKVEFGVLVSFAYKVQGSDDSEEVVATRIETMLGDVAVAV HPKDTRYQHLKGNVIHPFLSRSLPIVFDEFVDMDFGTGAVKIT PAHDQNDYEVGQRHGLEAISIMDSRGALINVPPFLGLPRFEAR KAVLVALKERGLFRGIEDNPMVPLCNRSKDVVEPLLRPOWYVR CGEMAQAASAATRGDLRLPERHQRTWHAWMDNIRE\WCMFPG KLWVG\HR\IPAYFVTVSDPAVFPFGEDPDGRYVWSGRNEAARE KAAKEFGVSPDKISLQQDEVDLDTWFSGLFPLSILGWPNQSED LSVFYPTLLETGHDILFFWARMVMLGLKLTGRLPFFREVYLHA IVRDAHGRKMSKSLGNVIDPLDVTYGISLQGLHNQLLNSNLDPS EVEKAKEGQKADFPAGIECGTDALRFGLCAYMSQGRDINLDVN RILGYRHFCNKLWNATKFALRGLGKGFVPSPTSQPGGHESLVD WIRSRLEAVRLSNQGFQAYDFPAVTTAQYSFWLYELCDVYLEC LKPVLNGVDQVAECARQTLTYTCLDVGLRLLSPFMPFVTEELFQ RLPRMPQAPPSLCVTPYPEPSECSWKDPEAAALELALSITRA VRP\LRADYNLHESGPTCFLEVAD\EATGALASAVSGYVQGP QAQVVVAEAPWGLPAP\QCAVALASDRCSI\HLQLQG\LLDP ARELG\KLQ\AKRVEAQ\ROAQ\RLR\ERRA\ASGNPVKVP\E VQEADEAKLQQTAEALRKVDRAIALFQKML |
| 6026 | 2674 | 514 | GPITFLKKAKMKDMLRIHVLLGLAITTLVQAVDKVDCPRLC TCEIRPWFTPRSIYMEASTVDCNDLGLLTFPARLPANTQIILLQ TNNIAKIEYSTDFPVNLTGLDLSQNNLSSVTNINGKMPQLLSV YLEENKLTPEKCLSELNLQELYINHLLSTISPGAFIGLHN LLRLHLNSNRLQMINSKWFDALPNLEILMIGENPIIRIKDMNFK PLINLRSVLAGINLTETPDNALVGLLENLESISFYDNRLIKVPH VALQKVNLKFLDLNKNPINRIRRGDFSNNMLHLKELGINNMPEL ISIDSLAVDNLPLDKIEATNNPRLSYIHPNAPFRLPKLESML NSNALSALYHGTIESLPNLKEISIHSPNIRCDVIRWMNMNKTN IRFMEPDSLFCVDPPEFQGNVRQVHFRDMMEICLPLIAPESFP SNLNVAGSYVSVFHCRTA\BQPEIYWTSPGQKLLPNT\LT |

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|------------|--|--|--|
| | | | KFYVHSEGLTDINGVTPKEGGLYTCIATNLVGADLKSMVKVDG SFPQDNNGSLNLIKIRDIQANSVLVSWKASSKILKSSVKWTAFFVK TENSAAQASARIPSDVKVYNLTHLNPSTEYKICIDIPTIYQKNR KCCVNVTTKGLHPDQKEYEKNNTTLMACLGGLGIGVICLIS CLSPMNCDDGGHSYVRNVLQKPTFALGELYPLINLWEAGKEKS TSLKVKATVIGLPTNMS |
| 6027 | 5254 | 4148 | GGRRAPGRPGRSIKDEEEETVFREVVSFSDPLFVRYDKDRTTK PISFYLSLEELLANKPRLEDGFNVALSPLACRQPPPLSSQRPRRT LLCHDMGGYLDLDRFIQGSVVQTPYAFYHWQCIDVFVYFSHTV TIPPGVWNTAHRHGVCLGTFFITEWNEGGRLCEAFLAGDERSY QAVADRLVQIT\RFRRFDGWLINTENSLSLAAVGNMPPFLRYLT TQLHRQVPGGLVLWYDSVVQSGQLKWQDELNQHNRFVFDSCDGF FTNYNWREEHLERMLGQAGERRADVVGVDVFARGNVVGGRFDT DKVGGGFRPRASGPVPPPLGPHFLMDLPPFSAQRNDSSCSQSG DPVALNRNCPAPAKLCPH |
| 6028 | 120 | 3432 | NCLLLQAKGFHGEIEDLQQLWLTDTERRHLLASKPLGGLPETAKEQ LNVHMEVCAAFEAKEETYKSLMQKQQMLARCPKSAETNIDODI NNLKEKESVETKLNER\KT\KLEALNLA\MEFHNSL\QDFIN WLTQAEQTLNVASRPSLILDTVLQFIDEHKVFANEVNSHREQII ELDKTGTHLYFSQKQDVVLIKNLLISVQSRNEKVQORLVERGR SLDDARKRAKQFHEAWSKLMWLESEKSLDSELEIANDPKIK TQLAQHKEFQKSLGAKHSVYDTTNRTRGSLKEKTSLADNKLKD DMLSELRDKWDITCGKSVERQNKLEEA\LLFSGQFTDALQALID WLYRVEPQLAEDQPVHGDIDLVMNLIDNHKAFQKELGKRTSSVQ ALKRSARELIEGSRDSSSWVKVQMQLSTRWETVCALSISKQTR LEAALRQAEFEFHSVVHALLNLAEAEQTLRFHGVLPDDEALRT LIDQHKEFMKLEEKRAELNKATTMGDTVLAICHDPDSITTIKHW ITTIIRARPEEVLAWAKQHQQRLASALAGLIAQELLEALLAWLQ NAETTLTDKKEVIPQEIIEVKALIAEHQTFMEEMTRKQPDVDK VTKTYKRRADPSSLQSHIPVLDKGRAGRKRFPASSLYPSGSQT QIETKNPRVNLVSKVQVWLLALERRRKLNDALDRLEELREFA NFDFFDIWRKKYMRWMNHKKSVMDFRRIDKQDQDKITRQEFID GILSSKFPTSRLMSAVADIFDRDGDGYIDYEFVAALHPNKDA YKPI TDADKIEDEVTRQVAKCKAKRFQVEQIGDNKYRFFLGNO FGDSQQLRLVRLRSTVMVRVGGGWMALDEFVLKNDPCRAKGR NMBELREKFILADGASQGMMAFRPRGRRSRPSSRGASPNRSTVS SQAAQAASQPVPATTPKILHPLTRNYGKPLWLTNSKMSTPCKAA ECSDFPVPSAEGTPIQSKLRLPGYLSGKGFHSGEDSGLITAA ARVRTQFADSKKTPSRPGSRAGSKAGSRASSRSGSDASDFDISE IQSVCSDDVETVPQTHRPTPRASRPSTAKPSKIPTPQRKSPASK LDKSSKR |
| 6029 | 1 | 3533 | IMPCGSSRLRGCTHPNEPVSDLSYFDCIESVMENSKVLGESH AGISQNAKTGDLPAFGCECVGIASKALCGLTEAAQAAYLVGIFD PNSQAGHQGLVDP IQFARANQAIQMACQNLVDPGSSPSQVLSAA TIVAKHTSALCNACRIASSKTANPVAKRHFVQSAKEVANSTANL VKTIKALDGDPSEDNRNKCRIATAPLIEAVENLTAFASNPEFVS IPAQISSEGSQAQEPILVSAKPMLESSSYLIRTARSLATNPCKD PTWSVLAGHSHTVSDSIKSLITSIRDKAPGQRECDYSIDGINRC IRDIEQASLAAVSQSLATRDDISVEALQEQLTSSVQEIIGHLIDP IATAARGEAAQLGHKGTQLASYFEPLILAAVGVASKILDHQQQM TVLDQTKTLAESSALQMLYAAKEGGGNPKAQHTHDAITEAQLMK EAVDDIMVTLNEAASEVGLVGMVDAIAEAMSKLDEGTPPEPKG TFVDYQTTVVKYSKAI AVTAQEMMTKSVTNPEELGGLASQMTSD YGHAFQGMMAATAEP EEIFQIRTRVQDLGHGCI FLVQKAG\ ALQVCTDSYTKRELIECARAVTEKVS LVSALQAGNKGQTQACT TAATAVSGIIADLDTT IMFATAGTINABNSETFADHRENTLKTA KALVEDTKLLVSGAASTPDKLAQAQSSAATITQLAEVVKLGAA SLGSDDPETQVVLINAIKDVAKALSDLISATKAASKPVDDPSM YQLGKAQVMVINTVSLKTVKAVEDEATRGTRALEATIECIKQ ELTVFQSKDVPEKTSPEESIRMTKGITMATAKAVAAGNSCRQE DVIATANLSRKAVSDMLTACKQASFHPDVSDEVTRALRFGTEC |

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|------------|--|--|---|
| | | | TLGYLDLLEHVLVILQKPTPELKQQLAAFSKRVAGAVTELIQAA EAMKGTWVDPEDPTVIAETELLGAAASIEAAKKLEQLKPRAK PKQADETLDFEQLAEAKSIAAATSALVKSASAAQRELVAQKG VGSIPANAADDGQWSQGLISAARMVAAATSSLCEANASVQGH SEEKLSSAKQVAASTAQLLVACKVKADQDSEAMRRLLQAAGNAV KRASDNLVRAAQKAAFGKADDDVVVTKFVGGIAQIIAAQEEM LKKEERELEARKLAQIRQQQYKFLPTLREDEG |
| 6030 | 3 | 1777 | FPGRGSPALQLEVLICLGLMGLERALNVLAPIFYRNIVNLLTEN APWNSLAWTVTSYVFLKFLQGGTGSTGFVSNLRTFLWIRVQQF TSRRVELLIFSHLHLSLRWHLGRRTGEVLRIADRGTSSTVGLL SYLVFNVIPTLADIIIGIIYFSMFFNAWFGLIIVLCMSLYLTLT IVVTEWRTKFRAMNTQENATRARAVIDSLNFTVKYNAESYE VERYREAI IKYQGLEWKSSASLVLLNQTNLVLGLLGLLAGSLC AYFVTEQKLQVGDYVLFGTYYIQLYMLNWFGTYYRMIQTNFID MENMFDLLKK\ZTEVKDLPGAGPFRFQKGRIEFENVHFSYADGR ETLQDVSTFVMPGQTLALVPGSGAGKSTILRLFRFYDISSGCI RIDGQDISQVTOALFRFSHWELCPKDTVLFNDTIADNIRYGRVT AGNDEVEAAAQAAGIHDAIMAFPEGYRTQVGERGLKLSGGEKQR VAARTILKAPGIIILDEATSALDTSNERAIOASLAKVCANRTT IVVAHRLSTVVNADQILVIKDCIVERGRHEALLSRGGVYADMW QLQQQBEETS EDTKPTMER |
| 6031 | 160 | 1694 | LRMSNLKSNVNEAGKSKSNDSEGLEDAVEGADEALQKATKS DSSSPQVRORPHSSPFRFVTVEELLEETARGVTMMALAHEIVVNG DFQIKPVLPENSLKKRVKEIVHKAFFWDCLSVQLSEDPAYDHA IKLVGEIKETLLSFLPGHTRLRNQITEVLDLDLIIKQBAENGAL DISKLAEFIIGMMGTLCAPARDEBVKLKDIIKEIVPLFREIFSV LDLMKVDMANFAISSIRPHLMQOSVEYERKKFQEILERQPNSLD FVTQWLEEASEDLMTOKYKHALPVGGMAAGSGDMPRLSPVAVQN YAYLKLKWDHLQRPFPETVLMQDSRFHELQQL\REQTLILGAV LLVTFMSAAGISSQADFAEKLKMIKIVKILLTDMHLPSFHLKDVL TTIGEKVCLEVSSCLSLCGSSPFTTDKETVLKGQIQAVASPD IRRIMESRILTFLETYLASGHQKPLPTVPGGLSPVQRELBEVAI KRALVNYNMVFCPPYDAILSKILVRS |
| 6032 | 39 | 2415 | AARLCRAQPTKSAWMIRDLKMYPQTRHPAPHQPAQPFKFTISE SCDRIKEEFQFLQAYHSLKLECEKLAASEKTEMQRHYVMYYEMS YGLNIEMHKQAEIVKRLNAICAVIPFLSQEHQQQVQAVERAK QVTMAELNAIIGQQQLQAHLSHGHLPLVPLTPHPSGLQPPAIP PIGSSAGLLALSSALGGQSHLPKDEKHHNDNDHQDRDSIKSS SVSPSASFRGAEKHRNSADYSSSEKQKTEKEIAARYDSGEEK SDDNLVVDVSNEDPSSPRGSPAHSPRENGLDKTRLLKKDAPISP ASIASSSSTPSSKSKELSLNEKSTTPVSKSNTPTPTDAPTGS NSTPGLRPVPGKPPGVDFLASSLRTPMAVPCPYPTFPFIVPHAG MNGELTSPGAAYAGLHNISPQMSAAAAAAAAAAYGRSPVVGFD PHHMRVPAIPPNLTGIPGGKPAYSFHVSAQGQMPVFPFPDAL IGPGIPRHARQINTLNHGEVVCVAVTISNPTRHVYTGKGCVKVW DISHPGNKSPVSQLDCLNRDNYIRSCRLPDGRTLIVGGEASTL SIWDLAAPTFRKAELTSSAPACYALAI SPDSKVCFCSCSDGNI AVWDLHNQTLVRQFGHTDGCSCIDISNDGTKLWTGGLDNTVRS W\DLREGRQLQQHD/FFTSPVFSLGYP\TEEWLAVGMENS\N\V EVLHVTKPDYQLHLHESCVLSLKFAHCGKWF\VSTGKDNLLNA W\RTPYG\ASIF\QSKSSS\VLSCDI\SVDDKYIVTGS\GDK\ RATVYEVIIY |
| 6033 | 39 | 2415 | AARLCRAQPTKSAWMIRDLKMYPQTRHPAPHQPAQPFKFTISE SCDRIKEEFQFLQAYHSLKLECEKLAASEKTEMQRHYVMYYEMS YGLNIEMHKQAEIVKRLNAICAVIPFLSQEHQQQVQAVERAK QVTMAELNAIIGQQQLQAHLSHGHLPLVPLTPHPSGLQPPAIP PIGSSAGLLALSSALGGQSHLPKDEKHHNDNDHQDRDSIKSS SVSPSASFRGAEKHRNSADYSSSEKQKTEKEIAARYDSGEEK SDDNLVVDVSNEDPSSPRGSPAHSPRENGLDKTRLLKKDAPISP ASIASSSSTPSSKSKELSLNEKSTTPVSKSNTPTPTDAPTGS NSTPGLRPVPGKPPGVDFLASSLRTPMAVPCPYPTFPFIVPHAG |

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|------------|--|--|--|
| | | | MNGELTSEGAAYAGLHNISPMMSAAAAAAYGRSPVVGFD PHHIMRVFAIPNLGTGIPGGKPAYSFHVSADGQMOPVFPFDAL IGPGIPRHRQINTLNHGEVVCVITISNPTRHVYTGKGKCVKVV DISHPGNKSPVSQLDCLNRDNYIRSCRLPDGRTLIVGGEASTL SIWDLAAPTTPRIKAELETSSAPACYALAI SPDSKVCFCSSDGN AVWDLHNQTLVRQFGHTDGASCIDISNDGTLWTGGLDNTVRS W\DLREGRLQQHD/FFTSFVFSGLGYCP\TEEWLAVGMENSN\V EVLHVTKPDKYQLHLHESCVLSLKFAHCGKNF\VSTGKDNLLNA W\RTPYG\ASIF\QSK3SSS\VLSCDI\SVDDKYIVTGS\GDK\ RATVYRVIY |
| 6034 | 2683 | 714 | ESGRRRLKRRRSPCPGTAGGPGETNPGPGACPRGPREAAAAAM ETAPQEAAPPVPGADGDI EAPAEAGSPSPASPPADGRLKAAAKR VTFPSDEDIVSGAVEPKDPWRHAQNVTVDEIVIGAYKQACQKLCNC RQIPKLLRQLQEF\DLGHRLDCLDLKGEKLDYKTCEALEEVFKR LQFKVVDLEQTNLDEDGASALFDMIEYYESATHLNISFNKHIGT RGWQAAAHMMRKTSCQLYL\ DARNTPLLDHSAPFVARALRIRSS LAVLHLENASLSGRPLMLLATALKMMNMLRELYL\ADNKLNGLO DSAQGNLLKFNCSLQILDRLNNHVLDSGLAYICEGLKEQRKGL VTL\VLWNNQLTHTGMAFLGMLPHTQSLETNLGNPIGNEG RHLKNGLI SNRSVLRGLASTKLTCEGAVAVAEFIAESPRLLRL DLRENEIKTGGLMALSLALKVNHSLLRLDLDRPKKEAVKSFIE TQKALLAEIQNGCKRNLVLAREREKEQPPQLSASMPETTATEP QPDDEPAAGVQNGAPSPAPSPDSDDSDSDGEEEEEEGERDET PSGAIDTRDTGSSEPQPPPEPPRSGPPLPGLKPEFALALPEP PPGPEVKGSGSCGLEHLSCKNEKELEELLEASQESQOETL |
| 6035 | 19 | 404 | SVTYLGTILHKNLTGALPADPVQLISQTPPTKQQLSFLGMVG YFYLWIPGFAILLTKPLCKLTENLADAI DPKSFHSSFRSLKTA LENASTLALPDSSQPF\SLHTARVQGCVEILITQGLGPLPV |
| 6036 | 1745 | 356 | LPDVEKLGRRRGRKMSVEKGAATSVSNRGRFSGRFPKLRN SRGGQGRGVEKPPHLLAALILARGGSKGIPKNI\KHLAGVPLIGW VLRAALDSGAFQSVVWSTDHDEIENVAKQFGAQVHRRSSEVSKD SSTSLDAIIEFLNYHNEVDIVGNIQATSPCLHPTDLQKVAEMIR EEGYDSVFSVVRHQFRWSEIQKGVREVEPLNLPNPAKRPRQD WDGELYENGsfYFAKRHLIEMGYLQGGKMAYEMRAEHSVDIDV DIDWPFAEQRLVRYGYFGKEKLKEIKLLVCNIDGCLTNGHYVS GDQKEIISYDVKDAIGISLLKSGIEVRLISERACSKQTLSSLL LDCKMEVSVSDKLAUVDEWRKEMGLCWKEVAYLGNEVSDEECLK RVGLSGAPADACSTAQKAVGYICKNGGGRGA\IREFAEHIC\LL MEKGLINFMKNNRLAVNIGEEK |
| 6037 | 2936 | 1919 | WTSWWMSSVLTILLFSLQGNKMLNYSAPSAGGYLLPRKPVGT GGGPPRRHSVTLPPSSKFRQNLSSSLKGEAPALSSRDSRFRDR SFSEGGERLLPTQKQPGGQVNSRYKT\ELCRPPEENGACKYK DKCQFAHGIHELRLSLTRHPKYKTEL CRTFFHTIGFCPYGPRCHF HNAEERRALAGARDLSADRPLQHSFSFAGFPFAAATAATGLL DSPTSITPPFILSADDLLGSPPLPDGTNNPF\AFSSQELASLFA PSMGLPGGGSPTTFLFRMSESPHMFDSPPSPQDLSLSDQEGYLS SSSSSHSGSDSPTLDNSRRLPIFSRLSISDD |
| 6038 | 1450 | 426 | SSALQEFGRNHTFGVPLPFRKQIISCNLCQLRFNSDSQAAAH YKGTKHAKKLKALEAMKNKQSVTAKDSAKTTFTSITNTINTS SDKTDGTACTPAISTTTTVEIRKSSVMTTEITSKVEKSPPTATG NSSCPSTETEEBKAKRL\YCSLCKVAVNSASQLEAHNSGTHKH TMLEARNSGTIKAPPRAGVKGKPVNKGNTGLQNKTFHCEICD VHVNSSETQLKQHISSRRHKDRAAGKPPKPKYSPYNKLQKTAHPL GVKLIVFSKEPSKPLAPRILPNPLAAAAAAAVVSSPFLRTAP AATLFQTSALPALLRPAPGPIRTAHTPVLFPAPY |
| 6039 | 4073 | 1000 | LDEYEARLTLANLDDFEEDNEDDENRVNQEEKAKITELINKL NFLDEAEKDLATVNSNPFDDPDAAELNPFDPDSSEPI TETASP RKTEDSFYNNSYNPFKEVQTPQYLNPPDEPEAFVTIKDSSPQST KKXNIRPVDMSKYLADSSKTEEBEELDESNNPFYEPKSTPPNNL VNPVQELETERVKKAPAPPVLSPKTGVNLNENTVSAGKDLSTS |

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|------------|--|--|---|
| | | | PKPSPSPVLPGRKPNASQSLVWCKEVTKNYRGVKTINFTTSW RNLGSPFCAILHHFRPDLIDYKSLNPDQIKENNKAYDGFASIGI SRLLPEPSDMVLLAIPDKLTVMTYLYQIRAHFSGQELNVVQIEEN SSKSTYKVGNYETDTNSSVDQEKFYAELSDLKREPELQOPTSGA VDFLSQDDSVFVNDSGVGESESEHQTDPDHLSPSTAGPYCRRTK SDTEPQKSQSSSGTSGSDPGICSNSTDSQAQVLLGKKRLKA ETLELSDLYVSDKKKDMSPFFICEETDEQKLQTLDIGSNLEKEK LENSRSLECRSDPESPIKKTSLSPSTKLGYSYSRDLDLAKKHA SLRQTESDPPADRTTLNHADHSSKIVQHRLLSRQELKERARVL LEQARDAALKAGNKHNTNTAAPFCNRQLSDQDEERRRQLRER ARQLIAEARSGGKMSLPYGERAAEKLKERSKASGDENDNIEI DTNEEIPGFGVVGDELTLNLENDLTPQNSKLVLDLKLKLLB VQPQVANSFSSAAQKAVTESSEQDMKSGTDLRTERLQKTERF RKPVVFSSKDSVTKTQLOSFSQYIENRPEMKRQRSIQEDTKKGN EKAATITQRKPSSEVLNKGFKDS\SQYVVGELAALENEQKQ IDTRAALVEKRLRYLMDTGRNTEEEAMQOEFMLVNKKNALIR RMNQLSLLEKEHDLERRYELLNRELRLAIEDWQKTEAQRRE QLLLDELVALVNKRDAVLDIJAQEKQAEEDDEHLERTLEQNGK KMAKKECKCVLQ |
| 6040 | 475 | 1052 | PTALMTAPSCAFFVQFRQPSVSGLSQITKSLYISNGVAANNKLM LSSNQITMVINVSVEVNTLYEDIQYMQVPVADSPNSRLCDFFD PIADHHSVEMKQGR\TLHCAAGVSRSAALCLAYLMKYTHAMSL LDAHTWTKSCRPIIRPNSGFNEQLIHYEFQLFGKNTVHMVSSPV GMIPDIYEKEVRLMIPL |
| 6041 | 2 | 3886 | TEKDEKTAHNLENVLIHFWERLSEICVAKISEFEADVESVLGVS NLLQVLQKPKGSLKSSKKKNGKVRPADEILESNEKNEKCVSSEG EKIECWELTTEPSLTHNSSGLLSPLRKKPLEDLVCKLADISINY VNERKSEQHLRFLSTLLDSPSSSRVFKMLLGDEKQSTVQAKPLE IAKLQKNPVAVQFLYQKLIGWLNEDQRKDFGLVDILYSALRCC DNDMERKKVLDLTKVDLKNWSLLKIEKACPSDDKHALVTPWL KGDILGEKLVNLADCLCNEDLESRSVSSSHFSEWTLTSLVLSQ HVKNDYLGIDVYVERIIVRLHETLFTKTKLSEAESSDSSVSFIC DVAINYFSSAKGCLLMPSSDILLTLFQLCAQSKEKTHLPDFLI CKLKNLWLSGVNLLVHQTDSYKESTPLHLSALWLKNQVQASSL DINSLQVLLSAVDDLNTLLESEDSYLMGVYIGSVMPNDSSEWEK NRQSLPMQWHLRPLLEGRLSLNYECFKTDFKEQDIKTLPSELCT SALLSKMVLIALRKETVLENNELEKIIAELLYSLQWCEELDNPP IFLIGFCEILQKMNITYDNLRVLGNMSSGLLQLLFNRSREHGTW SLIIAKLILSRSSISSEVKPHYKRKESFFPLTEGNLHTIQSLCP FLSKEEKEKFSACIIPALLGWTKKDLCSNNGGFGHLAIFNSCLQ TKSIDDGRLLHGILKIIISWKEHEDIFLFCNLSEASPEVLGV NIEIIRFLSLFLKYCSSPLAEESEWDFIMCSMLAWLETTSENQAL YSIPLVQLFACVCDLACDLSAFFDSTTLDTIGNLFPVNLISEWK EFFSQGIHSLLLPILVTVTGENKDVSETS FQNALKPMCELTLY ISKEQLLSHKLPARLVADQKTNLPEYLQTLNLTAPLPLFRARP VQIAVYHMLYKLMPELPQYDQDNLSYGEDEEPALSPPAALMS LLSIQEDLENVLCIPVQIVTIKPLSEDFCYVLGYLLTWKLI LTFKAASSQLRALYSMYLRKTKSLNKLLYHLFRMPENPTYAB TAVEVPNKDPKTFTEELQLSIRETTMLPHYIPLACSVYHMTL KDLPMVRLWVNSSEKRVFNIVDRFTSKYVSSVLSFQBISSVQT STQLFNGMTVKARATTREVMATYTTIEDIVIELIQLPSNYPLGS IIVESGKRVGVAVQQRNWMQLSTYLTHTQNGSIMGLALWKN VDRFEGVEDCMICFSVIHGFNYSLPKKACRTCKKKFSA\CLY KWFTSSNKSTCSLCRETF |
| 6042 | 1306 | 253 | MAELAPASPSDIKASVNGDTTLCSRRQSCGMNEVRQVSLTYP GSPAPSHSLPLQPRSGGSLCPSRAW/PDPHQLFDDTSSAQSRGY GAQRAPGGSLYPAASPTPHAAFLADPVSNMAMAYGSSLAAGQKE LVDKNIDRFIPITKLKYYFAVDIMYVGRKLGLLFFPYLHQDWEV QYQDTPVAPRFVDNAPDLYIPAMAFITYVLVAGLALGTDRFS PDLLGLQASSALAWLTLEVLAILLSLYLVTVNTDLTIDLVAFL GYKYVGMIGGVLMLGLLFGKIGYYLVLGWCCVAIFVMIRTLRLK |

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|------------|--|--|--|
| 6043 | 403 | 599 | ILADAAAEVGPVRGARNQLRMYLTMAVAAQPMMLYWLTFHLVR LCLEFFFPFCATPVLPPLSLISAL/CLSHLSVSSWFPCQPPPLPC PLPPLQNKTKAGSLSTEQSERG |
| 6044 | 793 | 412 | KLEMWNTLISKVKISREVTMIASKFGIGQQVRHSLGLYLVVV DIDPVYSLSEPSDELAVNDELRAAPWYHVVMEDDNLVPVHTYL AEAQLSSELQDEHP\EQPSMDELAQTIRKQLQAPRLRN |
| 6045 | 155 | 2299 | SPLPQVAAMNYLRRRLSDSNFMANLNPNGYMTDLORPQPPPPPPG AHSFGATPGPGTATAERSGVAAPASPAAPSPGSSGGGFFSSSL SNAVKTATAAAATFSEQVGGSGGAGRGGAASRVLLVIDEPHT DWAKYFKGKKIHGEIDIKVEQAEFSDNLNVAHANGGFSVDMEV RNGVKVVRSLKPDFVLIRQHAFSMARNGDYRSLVIGLQYAGIPS VNSLSHVYNFCDKPWVFAQVRLHKKLGTEEFPLIDQTFYPNHK EMLSS\TTPVVKMGHGTWGWGKVKVDNQHFQDIASVVALT KTYATAEPFIDAKYDVRVQKIGQNYKAYMRTSVSGNWKNTGSA MLEQIAMS DRYKLWVDTCEIFGGLDICAVALHGXGDRDHIE VVGSSMPLIGDHQDEDKQLIVLVVNMQAALPQRQRDASPGR GSHGQTPSPGALPLGRQTSQQPAGPPAQQRPPFQGGPPQPGPGP QRQGPPLQQRPPPGQQHLSGLGPPAGSPPLPRLPSPTSAPOQP ASQAAPPTQGGGRQSRPVAGGPGAPPAARPPASPSFQRQAGPPQ ATROTTSVSGPAPPKASGAPPGGQQRQGPPOKPPGPGFTRQASQ AGPVPRTGPPPTTQQRPSGPGPAGRPKPLAQKPSQDVPEPATA AAGGPPHPQLNKSQSLTNAFNLPEPAPPRPSLSQDEVKAETIRS LRKSFASLFS |
| 6046 | 212 | 1075 | EGLTGPCERVFPFLGRGPPHAGTRAGHRAVWAGPESLPPLPR SLIMDSPRAGTHQGGLDAETEVGADRCTSTAYQEQRPQVEQVGK QAPLSPGLPAMGGPGPGFCEDPAGAGGAGAGGSEPLVTVTVQCA FTVALRARRGADLSSRLALLGOALPHQ\AQLGQLSYLAPGEDGH WVPIPEESLQRAWQDAACPRGLQLQCRGAGGRPVLYQVVAQH SYSAQGPEDLGFRRQDITVDVLCEDVQAWLEGHCDGRIGIFPKCF VVPAGPRMSGAPGRLFRSQGDQ |
| 6047 | 49 | 1405 | PVLVTSLRMREADTLRPPQLMEVSADIISTVFNHTGELLATGD KGRGVVIFQREPESKNAPHSQGEYDVYSTFQSHPEFDYKLSLE IEBKINKIKWLPOQNAHSLSTNDKTIKLWKITERDKRPEGYN LKDEEGKLKDLSTVTSLOVPVLKPMDLMEVSPRRIFANGHTYH INSISVNSDCBTYMSADDLRLNLWHLAITDRSFTP\NIVDIKPA NMEDLTEVITASEFPHHCNLFVYSSSKGSLRLCDMRAALCDK HSLFEEPEPDSNRSFFSEIIS\SVSDVKFSHSDRYMLTR\DYL TVKVDL\NMEARPIETYQVHDYLSKLSLYENDCI FDKFECA WNGSDSVIMTGA\YNNFFRMFDRNTKRDVTL\EASRESSKPRAV LKPRRVCVGGKRRRDDISVDSLDFTKKILHTAWHPAENIIAIAA TNNLYIFQDKVNSDMH |
| 6048 | 1 | 3194 | GIRTPKFCDSPTSDLEMRNGRGRKMRPNSTPVTATASDS KGTSSSKTRAGANSKGRGSONSSEHRPPASSTSEVDKASPS ANKRKNKPLSDMELNSSSEDSKGSKRVRTNSMGSATGPLPGTKV EPTVLDRNCPSVPLIDCPHPNCNKYKHINGLYHQAHAHTDDD SKPEADGDSEYGEPIHLADLGSCNG\ASVSQK\GSLSPARSAT PKVRLVEPHSPSPSSKFSKGLCKKKLSGEGDIDLGALSNDGSD DGPSVMDETSNDADFSLERKCKEKKCKKPSLKEKIPSKSLK SARPI/APLAIPPQQIYTFQTATFTAASPGSSSGLTATVAQAMP NSPQLKPIQPKPTVMGEPFTVNPALTPAKDKKKDKKKKESSE LESPLTPGKVCRAEKGKSPFRESSNGMKMBGLLNGSSDPHQSR LASIKAEADKIYSFTDNAPSPSIGSSRLNTTPTQPLTPLHV TQNGAEASSVKTNSPAYSDISDAGEDGEGKVDVSKSDAEQVK EGAKTFLFPQPSKDSPPYQGFESYSPSYAQSSPGALNPSSQ AGVESQALKTKRDEEPESIEGKVKNDICEKKPELSSSSQPPSV IQORPNMYMSLYNQYAYVPPYGYSDQSYHTLLSTNTAYRQQ YEEQKQKQSLQKQGRVDKKAEMGLKEREALKEEWKQKPSIPP TLTKAPSLTDLVKGSGPKAKEPGADPAKSVIIPKLDSSSKLPQ APEGLKVKLSDASHLSKEASEAKTGAECGRQAEMDPIILWYRQEA EPRMWTYVYPAKYSDIKSEDERWKEERDRKLKEERSRSKDSVVK |

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|------------|--|--|--|
| | | | EDGKESTSSDCKLPTSEESRLGSKPRPSVHVFPVSSPLTQHQSYPYMHGYSYSQSYDPNHPYSRMPAVMMONYPGSYLPSSYSFSPYGSKVSGGEDADKARASPSVTCSSSESALDILQHASHYKSKSPTISDKTSQERDRGGCGVVGSGGSCSSVGGAGGERSVDRPRTSPSQRLMSTHHHHHLLGYSLPAQYNLPYAAGLSSTAIVASQQGSTPSLYPPRR |
| 6049 | 215 | 1089 | AMTGVFDRRVPSIRSGDFQAPFQTSAMHHPQESPTLPESATDSJYYSPTGGAPHGYCSPTSASYG\KALNPYQYQHGVNVSAGSYPAKAYADYSYASSYHQYGGAYNRVPSATNQPEKEVTEPEVRMVGKPKKVRKPRTIYSSFQLAALQRRFQKTQYLALPERAEALASLGLTQTQVKIWFQNKRSKIKKIMKNGEMPPEHSPSSDPMACNSPQSPAVWEPQGSRRSLSHHPAHPPSTSNQSPASSYLENSASWYTSAASSINSHLPPPGSLQHLALASGTLTY |
| 6050 | 566 | 1718 | XGLERTCCAMEESDSEKTEKENLGPMDPPLGEPG\GSLGWVLPNTAMKKKVLMLGKSGSGKTSMRSIIFANYIARDTRRLGATILDRIHSLQINSSLSTYSLVDSVGNKTFTDVEHSHVRFGLNLVLNLWDCCGGQDTFMENYFTSQRDNIIFRNVEVLIYVFDVESRELEKDMHYQSCLEAILQNSPDAKIFCLVHKMDLVQEDQDRLIFKEREEDLRLSRPLECSCFRTSIWDETLKAWSSIVYQLIPNVQOLEMNLRFPAEIIAEDEVLLFERATFLVISHYQCKEQDRAHFEKISNIIKQFKLSCSKLAASFQSMVNRNSNFAAFIDIFTSNTYVMVMSDPSIPSAATLINIRNARKHFEKLERVDGPKQCLLMR |
| 6051 | 566 | 1718 | XGLERTCCAMEESDSEKTEKENLGPMDPPLGEPG\GSLGWVLPNTAMKKKVLMLGKSGSGKTSMRSIIFANYIARDTRRLGATILDRIHSLQINSSLSTYSLVDSVGNKTFTDVEHSHVRFGLNLVLNLWDCCGGQDTFMENYFTSQRDNIIFRNVEVLIYVFDVESRELEKDMHYQSCLEAILQNSPDAKIFCLVHKMDLVQEDQDRLIFKEREEDLRLSRPLECSCFRTSIWDETLKAWSSIVYQLIPNVQOLEMNLRFPAEIIAEDEVLLFERATFLVISHYQCKEQDRAHFEKISNIIKQFKLSCSKLAASFQSMVNRNSNFAAFIDIFTSNTYVMVMSDPSIPSAATLINIRNARKHFEKLERVDGPKQCLLMR |
| 6052 | 566 | 1718 | XGLERTCCAMEESDSEKTEKENLGPMDPPLGEPG\GSLGWVLPNTAMKKKVLMLGKSGSGKTSMRSIIFANYIARDTRRLGATILDRIHSLQINSSLSTYSLVDSVGNKTFTDVEHSHVRFGLNLVLNLWDCCGGQDTFMENYFTSQRDNIIFRNVEVLIYVFDVESRELEKDMHYQSCLEAILQNSPDAKIFCLVHKMDLVQEDQDRLIFKEREEDLRLSRPLECSCFRTSIWDETLKAWSSIVYQLIPNVQOLEMNLRFPAEIIAEDEVLLFERATFLVISHYQCKEQDRAHFEKISNIIKQFKLSCSKLAASFQSMVNRNSNFAAFIDIFTSNTYVMVMSDPSIPSAATLINIRNARKHFEKLERVDGPKQCLLMR |
| 6053 | 201 | 1704 | KGTEMNKSRRWQSRRRHGRSHQQNFWFRLRDSERDSRAAQPAPHDSGHGDDSPSTSSGTAGTSSVPELPFGFYFDPEKKRYFRLLPGHNNCNPLTKESIRQKEMESKRLRLQEDRRKKIARMGFNASSMLRKSQGLFNVTNYCHLAHELRLSCMERKKVQIRSMDPALASDRFNLIADTNSDRLFTVNDVTVGSGKYGIINLQSLKPTLKVFMHENLYFTNRKV\NSVCWASLNHLDSHILLCLMGLAETPGCATLLPASLFVNSHPAGIDRPG\MLCSFRIPGAWSCAWSLINIQANNCFTGLSRRVLLTNVVTGHRQSFGTNSDVLAQQFALMAPLLFNGCRSGEIPFIDLRCGNQGGKWKATRLFHDSAVTSVRILQDEQYLMASDMAGKIKLWDLRTTKCVRQYEGHVNEYAYLPLHVHEEGILVAVGQDCYTRIWSLHDARLLRTIPSPYPASKADIPSVAFSSRLGGSRGAPGLLMVAGQDLYCYSYS |
| 6054 | 1 | 1054 | PPFARLQEFGTSSRRHMAAPSGVHLLVRRGSHRIFSSPLNHIYLIHQSSSQRRNFFRRQRDISHSIVLPAAVSSAHPVPKHKKPDYVTGIVPDWGDSEIVKNEDQIQGLHQAQCLARHVLLAGKSLKVDMTTEEDALVHREIISHNAYPSPLGYGGFPKSVCTSVNNVLCHGI?DSRPLQDGDIIINIDVTVYNYNGYHGDTSFTLVGNVDECGKKLVEVARRCRDEAIAACRAGAPFVIGNTISHITHQNGFQVCPHFVGHGIGSYFHHPEIWHHANDSLPMEEGMFTIEPIITEGSPREFKLEDAWTVVSLD/TSKVSAQFHTVLITSRGAQILTKLPHEA |

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|------------|--|--|---|
| 6055 | 421 | 2364 | PPYFLLSFLAWLYGQSDRTETDISQAGPPPGTLQCSALHHPD GCANCSRFCRDCSPACQCHTHVFPGNALNGVQPPPELSRRLALI SSREPPRRKKKKSQTETGKERERTSFLTQGGKRFELQHLGAGICM TLLITGDSIVSAEAVWDHVTMANRELAPKAGDVIKVLDSANKDW WVGQIDDEEGWFPASFVRLWVNHDEVEEGPSDVQNGHLDPNSD CLCLGRPLQNRDQMRANVINEIMSTERHYIKHLKDICEGYLKQC RKRDMFSDQELKVI FGNIEDIYRFQMGFVRDLEKQYNNDDPHL SEIGPCFLEHQDGFWIYSEYCNNHLDACMELSKLMKDSRYQHFF EACRLQQMIDIA\IDGFLLPVQKICKYPLQLAELLKYTAQDH SDYRYVAAALAVMRNVTTQQLINERKRRLCKYPLQIAQWQASVLDWE GED\LDRSSELIYTGEMAWIYQP\YGRNQQRVFFLDHQMVLCK KDLIRRDILYYKGRIDMDKYEVVDIEDGRDDDFNVSMKNAFLKH NKETEETHLFFAKKLEEKIRWLRAFREERKMVQDEKIGFEISE NQKROAAMTVRKVPKQKGVNSARSVPPSPPPQDPLHGOYLVP \DGTAAQSQVFTEFTEPKRSQSPFWQNFSLTFFFK |
| 6056 | 43 | 3358 | SGGRGPVRVRSEQLSPSAEQVSQISQISLGRRLSSLPSPPSRA LAPTRAPDTALTMEVAEVESPLNPSCKIMTFRPSMEEFREFNKL YLAYMESKGAHRAGLAKVI PPKWKPRQCYDDIDNLLIPAPIQQ MVTGQSGLFTQYNIQKKAMTVKEFRQLANSKYCTPRYLDVYEDL ERKYWKNTLFVAPIYGADINGSIYDEGVDEWNIARLNTVLDVVE EECGISIEGVNTPYLYFGMWKTTFAWHTEDMDLYSINYLHFGEP KSWYAIIPPEHGKRLERLAQGFPPSSSQGDAFLRHKMTLISPSV LKKGYPFDKITQEAGEFMITFPYGYHAGFNHGFNCAESTNFGAT VRWIDYGVKAKLCTCRKDMVKISMDIFVRKFPQDRYQLWKQKGD IYTIIDHTKPTPASTPEVKAWLQRRRKVRKASRFQCARSTSKRP KADEEEVSDVDGAIEVPNPDSVTDDLKVESEKSEAAVKLRNTEA SSEEESASRMQVEQNLSHDKLSGNSCLSTSVDIEDIKTEDDKA YAYRSVPSISSEADDSIPLSTGYEKEKSDPSSELSWPKSPESCS SVAESNGVLTGEESDVESHGNGLEPGEI PAVPSGERNSPFVPS IAEGENKTSKSWRHPLSRPPARSPMTLVKQAPSDDEELPEVLSI EEEVEETESWAKPLIHLWQTKPPNFAAEQVEYNATVARMKPHCAI CTLLMPYHKPDSSNEENDARWETKLDDEVVTSEGTAKPLIPCMCF IYSEENIEYSPNAPLEEDGTSLLISCAKCCVRVHASCYGPISH EICDGLWCARCKRNAWTAECCLCNLRGALKQTKNNKWAHVMA VAVPEVRFNTVPERTQIDVGRI PLQRLKLCIFCRHRVVRVSGA CIQCSYGRCPASFHVTCABAAGVL\MEPDDWPPYVNI TCPRHKV NPNVSKAKCEKVISVGQTVITKHNTRYYSRVMAVTSQTFYEV MFDDGFSFRDTPFEDIVSRDCLKLPPAEGEVVQVKWPDGKLYG AKYFGSNIAMHYQVEFEDGSQIAMKREDIYTLDEELPKRVKARF VSAGRCHLGTQVNSLSPPHVSQAQQETYLGFWINSKXSQCNI FLSGT |
| 6057 | 1 | 853 | FVARLKEQEGEGGLGPRKEKGRARGRERRRRKMLTRCCFVFLVQ GSYLVICGQDDGPPGSEDPERDDHEGQPRPRVPRKRGHISPKS RFPANSTLLGLLAPPGEAWGILGQPPNPNHSPPPSAKVKKIFG WGDYFSNIKTVALNLLVTGKIVDHGNGTFSVHFQHNATGQGNIS ISLVPPSKAVEFHQEQQIFIEAKASKIFNC\RMWEKVE\RGRR TSLFTHDPAKICSRDHAQSSATWSQSPPFKVVCVYIAPYSTYR LVQKVCPCPDYNYHSDTPYPSG |
| 6058 | 1 | 986 | HPLPSASLGLPSVSLGVSLCVRSALEAVVPMPLPKRRRARVSGP SGDAASSTPPSTRFPGVAIYLVEPRMGRSRAFLTGLARSKGFR VLDACSSSEATHVMEETSAAEAVSWQERRMAAAPPGCTPPALLD ISWLTESLGAGQPVVPECRHRELVAGPSKGPLSPAWM PAYACQR PTPLTHTHTGLSEALEILAEAGFEGSEGRLLTFCRAASVLKAL PSPVTTLSQLQGLPHFGEHSSRVVQELLEHGVCCEEVERVRSE/ RLFTQIFGVGVKTADRWRBGLRTLDDLEQPKLTQQQKAGEP SREAGPWASLNLCTLDPSASTP |
| 6059 | 2 | 3650 | QQDFESLADLTDHRAHRCPGDGGDDPQLSWVASSPSSKDVASPT QMIGDGDGLGEEEGGTGLPYPCQFCDKSFIRLSYLKRHEQIH SDKL2FKCTYCSRLFKHRSRDRHIKLTGDKKYHCECEAAFS RSDHLKIHLKTHSSSKPFKCTVCKRGFSSTSLQSHMQAHKKNK EHLAKSEKRAKDDFMCDYCEDTFSQTEBLEKHVLTTRHPQLSEK |

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|------------|--|--|---|
| | | | ADLQCIHCPEVFDENTLLAHIHQAHAHQKHCCPMCP\QFSSV EGVYCHLDHRQPDSSNHVSVPDPVLGVSASMSSATPDSSASV ERGSTPDSTLKLPRGQKKMRDDGGQGWTKVVSFCFYCKRDFNSL AVLEIHLKTIHADKPOQSHTCQICLDSMPTLYNLNEHVRKLHKN HAYPVMQFGNISAFHCNYCPMFADINSIQEHIRVSHCGPNANP SDGNNAFPCNQCSMGFLTTESSLTEHIQ\Q\AHCSVGSAKLESFV VQPTQSFMEVYSCFYCTNSPIFGSILKLTKHIKENHKNPLAHS KKSKEQSPVSSDVEVSSPKRQRLSASANSISNGEYPCNQCDLK FSNFESFQTHLKLHLELLLRKQACPOCKEDFDSQESLLQHLTVH YMTTSTHYVCESCDKQFSSVDD\LQKH\LLDMPHPLCCTHCT\L CQEVFDS\KVS\QVHLAVKHSNEKKMYRCTACNWDPRKEADLO VHVKSHLGNPAKAKHCFI\CGGETFSTEVELQCHITTHSKKYNCK FCSKAFHAIILLEKHLREKHCVFDAATENGANGVPPMATKKAE PADLQGMILLKNPEAPNSHEASEDDVDASEPMYGCIDCGAAYTME VLLQNHRLRDHNIIRPGEDDGSRRKAEFIKGSKCNVCSRTFFSE NGLREHLQTHRGPAKHYMCPICGERFPPSLTLTEHKVTHSKSLD TGTCRIKMPQSEEEFI\EHCCMHDPDLRNSLTGPRCVVCMQTVT STLELKIHTFHMOKLAGSSAASSPNGQGLQKLYKCALCLKEFR SKQDLVKLDVNLPGYGLCAGCMARSANGQVGLAPPEPADRPA GLRCEPCSVKFESAEDLESHEMVDHRLTFETSGPRKGTQTSFV PRKKTQCIKCQMTFENEREQI\HIVANHMI\BEGINHECKLCNQM FDSPAKLLCHLIEHSFBGMGGTFKCPVCFVQVANKLQQHIFA VHGQEDKIYDCSQCPQKFF\QTELOQNHMTMSQHAQ |
| 6060 | 2145 | 202 | SYEIVGKNKLEVNHSQKALCKKCLPSRLPLFGENLPLLDGRFR KEPRSRGSRERDNMLLHHSCLCFRSLWFLAVLLSLAPASS DISASRPNILLMADDLGIGDIGCYGNIMTTPNIDRLAEDGVK LTQHISAASLCTPSRAAFLTGRYPVRSGMVSSIGYRVLQWTGAS GGLPTNETTFAKILEEKGYATGLIGKWHLGLNCESASDHCHPL HHGFDFHYGMPFSLMGDCARWELSEKRVNLEQKLNFLQVLA ALTLVAGKLTHLIPVSWMPVIVSALSALLASSYFVGLIVHA DCFLMRNHTITEQPMCFQRTTPLLQEVASFLKRNKHGPFLLFV SFLHVHIPLITMENFLGKSLHGLYGDNVKEMDWMVGRILDTLDV EGLSNSTLIYFTSDHGGSLNQLGNTQYGGWNGIYKGGKMGGW EGGIRVPGIFRWPGVLPAGRVIGEP\SLMDVFETVVRLAGSEVP QDRVIDGQDLLPLLLGTAQHSDEFLMHYCFRFLHAARWHQRDR GTMWKVHFVTFVFPQPEGAGACYGRKVCPCFGEKVHHDPELLFD LSRDPSETHILTPASEPVFYQVMER\VOQAVWEHQRTLSFVPLQ LDRIGNIWRPWLQPCCGPFFLCWCLREDDPQ |
| 6061 | 110 | 1330 | MNIHMKRRTIKNINTFENRMLMDGMPAVRVKTELLESEQSPN VHNYPDMEAVPLLLNNVKGEPEDSLSDVDFQTQTEPVDLSINK ARTSPTAVSSSPVSMASASSPSTSTSSSSSSRLASSPTVITS VSSASSSTVLTGFLVASASGVGGQQLHIIHPVPSSSPMNLQ SNKLSHVHRIPVVVQSVPVVYTAVRSPGNVNTIIVVPLEDGRG HGKAQMDPRGLSPRQKSDSDDDDLNVTLDVNETGSTALSIA RAVQEVHPSVPSRVGRNRMNNQKFPKCSISPFSESTRRQRTVLN PPDSRKTAYSTDCCF\EGLOQKLYTKSSSPGRVHRRTHTEGKPY KCTWEGCTWKFARSDLTRHYRKHTGVKPKCADCDRSPSRSDH LALHRRRHMLV |
| 6062 | 71 | 1079 | ETMAKNGPENCEDCHILNAEAFKSKKICKSLKICGLVFGILALT LIVLFWGSKHFWPEVPKAYDMEHTFYSNGEKKKIYMEIDPVTR TEIFRSGNGTDETLVHDFKNGYTGIFYVGLQKCFIKTQIKVIP EFSEPEEIDENEEITTTFFEQSVIWPAPKPIENRDLKNSKI LEICDNVTMYW\INPTL\ISGTFKQLHNFAPILVSELQDPE BEGEDLHFPANEKKGIEQNEQWVVPQVKVEKTRHARQASEEELP INDYTENGIEFDPMLEDERGYCCYICRRGNRYCRRVCEPLLGYYP YPYCYQGGRVICRVIMPCNWWVARMGLRV |
| 6063 | 71 | 1079 | ETMAKNGPENCEDCHILNAEAFKSKKICKSLKICGLVFGILALT LIVLFWGSKHFWPEVPKAYDMEHTFYSNGEKKKIYMEIDPVTR TEIFRSGNGTDETLVHDFKNGYTGIFYVGLQKCFIKTQIKVIP EFSEPEEIDENEEITTTFFEQSVIWPAPKPIENRDLKNSKI LEICDNVTMYW\INPTL\ISGTFKQLHNFAPILVSELQDPE |

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|------------|--|--|---|
| | | | EEGEDLHFPANEKKGIEQNEQWVVPQVKVEKTRHARQASEBELP INDYTENGIEFDPMLEDERGYCCYICRRGNRYCRRVCEPLIGYYP YPICYQGGRVICRVIMPCNWWVARMIGRV |
| 6064 | 913 | 311 | NLPQSLPRPTEHSPFYSLEKMTDLVAUVDVALSDGVHKIEFEHG TTSGRKRVVYVDGKEEIRKEWMFKLVGKETFYVGAARKATINID AISGFAYEYTLINGKSLKKYMEDRSKTTNTWVLHMDGENFRIV LEKAMDVWCNGKKLETAGEFVDDGTETHFSIGTH\ACYIKAV\ SSG\KRKEGIHTLIVDNREIPEIAS |
| 6065 | 1153 | 641 | MSVRVARVANVRGLGASYRRGASSFPVPPFGAQQVAELLRDATG AEEAPWAATERRMPGQCSVLLFPQGQSQVVGMRGLLNYPVRV RLYAAARRVLGYDLELSLHGPQETLDRTHCQPAIFVASLAUV EKLHLQPSVIENCVAAGFSGVEFAALVFAGAMEFAEG |
| 6066 | 68 | 3470 | VKENMPATRKPMRYGHTEGHTEVCFDDSGSFIVTCGSDGDVRIW BDLDDDDPKFINVGEKAYSCALKSGKLVTAVSNNTIQVHTFPEG VPDGIILTRFTTNANHVVENGDGTIAAGSSD\FLVKIVDVMDS QQKTFRGHDAFVLSLSDPKDIFLASASCDGSRVWQISDQTC ISWPLQKCNVDVINAISICRLAWQPKSGKLLAIPVEKSVKLYRR ESWSHQFDLSDNFISQTLNIVTWSPCGQYLAAGSINGLIIVWNV ETKDCMERVKHEKGYAICGLAWHPTCGRISYTDAGNGLLENV CDPSGKTSSSKVSSRVEKDYNLDFDGDMSNAGDFLNDNAVEIP SFSKGIINDEDEDELMMASGRPRQRSHILEDDENSVDISMLKT GSSLLKEEEDGQEGSIHNLPLVTSQRPFYDGPMTTPRQKPFQS GSTPLHLTHRFMVVNSIGIRCYNDEQDNAIDVEFHOTSIIHAT HLSNTLNYTIADLSHEAILLACBSTDELASKLHCLHFSWSSK EWIIDLQONEDIEAICLGQGWAAATSAALLRLFTIGGVQKEVF SLAGPVVSMAGHGEQLFIVYHRGTGDFDQCLGVQLLELGKKKK QILHGDPLPLTRKSYLAWIGFSAEGTPCYVDSEGIVRMLNRGLG NTWTPICNTRHECKGKSDHYVWVGIHENPQQLRCIPCKGSRFP TLRPAVAILSFKLPCYQIATEKGQMEEQFWRSVIFHNHLDYLA KNGYEYESTKNQATKEQQLLMKMLALSCKLEREFRCVELADL MTQNAVNLAIKYASRSRKLILAQKLSLAVEKAAELTATQVEE EEEDFRKKLNAGYSNTATEWSQPRFRNQVEEDAEDSGEADDEE KPEIHKPGQNSFSKSTNSDVSAKSGAVTFSSQGRVNPFKVSAS SKEPAMSMNSARSTNILDNMGKSSKKS\TALSRTTNNEKSPIK LIPKPKPKQASASYFQKRNSQTNKTEEVKEENLKNVLSPTPA CPPQNTENQRPKTGFMWLEENRSNLSNDNPDFSDEADIIEGEM IRFRVLSTEERKVVANKAKGETASEGTEAKKRKRVRVDESDETE QEBKAKENLNLSSKKQKPLDFSTNQKLSAFAPKQE |
| 6067 | 858 | 321 | LPWQRLGVLLSRGKMAVTGWLESLRTAQKTALLQDGRKRVHYLF PDGKEMAEYDEKTESELLVRKWRVKSALGAMGQWQLEVGDPAPL GAGNLGPPELIKESNANPIFMRKDTKMSFQWRIRNLPYPKDVYSV SVDQKERCIIIVRTTNKKYKFSIPDLDRHQLPLDDALLSFA\T PTAP |
| 6068 | 13 | 1730 | GSKMADLANEEKPAIAPPVVFQKDKGQKSPAEQKNLSDSGEEP RGEAEAPHHGTGHPESAGEHALEPPAPAGASASTPPPPAPEAQL PPFPRELGRSAGSSSPGGEDSDREDGNYCFFVKRERTSSLTQ FPPSQSEERSSGFRLKPPTLIHQAPSAGLPSQKPKQQRSLVR PAVLQAPQPKALSQTVPSSGTNGVSLPADCTGAVPAASPDAAW RSPSEAADEVCALEKEEPQKNESNASEBEACEKDPATQQA FGQNLDRVVKLINESVDEADMENAGHPSADTPTATNYFLQYISS SLENSTNSADASSNKVFVGQNMSEVLSPPKLENVSSDANRENA AAESGSESSQEAPEKESLABSAAAYTKATARKCLLEKVEVIT GEEAESNVLMQCKLFFVFKTSQSWVERGRGLLRNDMASTDDG TLQSRSLDAGPRGSLR\LIILNTKLWQMQIDKASEK\SIKITAM DNEQGVKVFLLISASSKDTGQVYALHHRILALRSRVEQEQA MPAPEPGAAPSNEEDSDDDVLAAPSATAAGAGDEGDGQTGGS T |
| 6069 | 583 | 27 | PTRPQAGSSSAMAQRLGKRVLSKLQSPSRARGPGGSPGGLOK RHARVTVKYDRRELQRRLDVEKWIDGRLEELYRGMEADMPDEIN IDELLELESEERSRKIQGLLKSCKGKPVDFIQELLAKLQGLHR |

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|------------|--|--|--|
| 6070 | 478 | 858 | IRVTVDGEFLHYIFPLQLDSEFW/RFTETHRGRHF\QVTLTAE TDCRYVSWRRKKLYLLFAQHRYISRLFSVLIGSDIADKLYALND RVYIGKRYHYDIRLPNFYQMSPTPEIRRSPLTQHFQNSRRY |
| 6071 | 2 | 1654 | HEARTKGNMALARP\VRFLFSLVTRLLAPRRGLTVRSPEDEPLPV VRIPVALQRLQEQRSRRRNLPFRVLVVRPGPLVSARRPELNQF ARLTGLRWERAPLASQGWKSRARRRDHFSIERAQQEAPAVRKLS SKGSFADLCAGWKPRVLHALQE\AAPEVVQ\PTTVQSSTIPSLLR GRHVVCAAETGSGKTL SYLLPQLRLG\HPSLDLSLPAPRGL VLVPSRELAQQVRAVAQPLGRSLGGLVLDLGGHGMRRIRLQLS ROPSADVLVATPGALWKALKSRSLISLEQLSFLVLDLDEADTLLDES FLRLVDYILEKSHIAEGPADLEDPFNPKAQLVLVGATFPEGVGQ LLNKVASPDVTTITSSKLHCIMPHVKQTFRLKLGADKVAELVH ILKHRDRAERTGPSGTVLVFCNSSSTVNWLGYILDHDKIQHLRL QGQMPALMRVGIFQSFQKSSRDILLCTDIASRGDLSTGVVELVNV YDFPPTLQDYIHRAGRVRGVSEVPVGTVISFVTHPVDVSLVQKI ELAARRRRSLPGLASSVKEPLPQAT |
| 6072 | 1 | 742 | KMERTEMMPTINSQLEFKSKFPFLVSSSRWLVRKRGELTAYVEDT VLFRRRTSKQQVYFFLPNDVLIITKKKSESYNVNDYSLRDQLL VESCDNEELNSSPGKNSSTMLYSRQSSASHLPTLTLSNHNANEK VEMLLGAETQSERARNITALGHSSGKPPADRTSLTQVEIVRSFT AKQPEDELSLQVADVLLI\YQRVSDGWYEGER\LRDGERGWFPME CAKEITCQATIDKNVERMGRLLGLETNV |
| 6073 | 620 | 860 | PCRRLARPLRRPG/SILVHCAVGVSRSATLVLAYLMLYHHLT LVEAIIKKVKDHRIIPNKGFLRQLLALDRRLRQGLEA |
| 6074 | 168 | 1110 | PGARCMATELQCPDSMPCNNQVNSASTPSPBQLRPGDLILDHA GGNRASRAKVILLTGVAHSSSLPAELDSGACGSSSLNSEGNSGSG DSSSYDAPAGNSFLBDCELSRQIGAQLKLLPMNDQIRELQTIIR DKTASRGDFMFSADRLIRLVVEEGLNQLPYKECMVTPPTGYKYE GVKFEKGNCGVSIIMRSGEAMEQGLRDCCRSIRIGKILIOQDEET QRAKVYAKFPFDIYRRKVLLMYPILQTG\NTVIEAVKVLIEHG VQPSVIIILSLFSTPHGAKSIIQEFPEZITILTEVHPVAPTHFG QKYFGTD |
| 6075 | 320 | 1091 | PPTCOQOEVEHH\YGYVPIILGNKTLPSRCHQCQVIVSSSHLLGT KLGPETIERAECTIRMNDAPTTGYSADVGNKITYRVVAHSSVFRV LRRPQEFVNRTFETVFIFWGPSPKMQPKPQGLVVRVIOAGLVFP NMEAYAVSPGRMRQFDDLFRGETGKDKREKSHSWLSTGWFTMIVA VELCDHVHVYGMVPPNYCSQRPRLQRMPIHYHYEPKGPDECVTYI QNEHSRKGNNHRRFITEKRVFSSWAQLYGITFSHPST |
| 6076 | 1721 | 107 | HPSPTAPRVQHLTMDCTWRILFLVAAATGTHAQVQLVQSGAEV KKPASVVKVCKVSGYTLTELSMHVVRQAPGKGLEWMAFDPED GETIYAQKFQGRVTMTEDTSTDYAMELSSLRSEDYAVYCATD HGDYAFDIWQGTMTVTSAPTAKPDVFPPIISGCRHPKDNSPVV LACLITGYHPTSV\TVTWYMGTSQA\QRTFPEIQRRDSYYMTS SQLSTPLQQRQGEYKCVVQHTASKSKEIFRWPESPKAQASSV PTAQPOAEGSLAKATTAPATTRNTGRGGEKKKEKEKEEQEERE TKTPECPSTQPLGVYLLTFAVQDLWLRDKATFTCFVVGSDLDK AHLTWEVAGKVPTGGVEEGLLERHNSGQSQHSRLTLPRSLWNA GTSVTCILNHPSLPPQRLMALREPAAPVKLSLNLASSDPPE A\ASWLLCEVSGFSPNILLMWLEDHGEVNTSGFAPARPLPKF\ RSTTFWA\WSVLRVPAPPSPQATYTCVSHEDSRTLLNASRSL BVSYYTDHGPMK |
| 6077 | 3687 | 1268 | LLPDMNLQPIFWIGLISSVCCVFAQTDENRCLKANAKSCGECTQ AGPNCGWCTNSTFLQEGMPTARSACDDLEALKKKGCPPDDIENPR GSKDIKKNKNTNRSKGTAELKPEDITQIQPQLVLRSGEP QTFTLKFKRAEDYPIDLYLM\DLSSYMKDDLENVKSLGTDLMN EMRRITSDFRIGFSGFVEKTVMPYISTTAKLRNPCTSEQNCTS PFSYKNVLSLTNKGVEFENELVGKQRLSGNLDSPEGGFDAIMQVA VCGSLIGWRNVTRLLVFSTAGFHFAGDGKLGIVLPNDGQCHL |

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|------------|--|--|--|
| | | | ENNMYTMSHYVDYPSIAHLVQKLSENNITQIFAVTEEFQPVYKE LKNLIPKSAVGTLSANSSNVIQLIIDAYNSLSSEVILENGKLS GVTISYQSY\CKNGVNGTGNGRKCNSISIGDEVQFEISITSNK CPKKDSDSFKIRPLGFTEEVILQYICECEQCEGIPESPCKH EGNGTFECGACRCNEGRVGRHCESTDEVNSEDIGCFTARKENQ FQKSASNHGRVPSAGQCVCRCRDNTNEIYSGKFCECDNFNCDS NGLICGGNGVCKCRVCECNFNNTYGSACDCLDSTCEASNGQIC NGRGICECGVCKCTDPKFQGTCEMCQTCLGVCAEHKECVQCRA FNKGEKKDTCTQECYFNITKVESRDKLPQPVQPPVSHCKEKD VDDCWFFYFTYSVNGNNEVMVHVVENPECPGTGDIIPVAGVVG IVLIGLALLIWKLLMIHDDRREFAKFEKEKMNKWDGTGENPIY KSAVTTVVNPKYEGK |
| 6078 | 1426 | 180 | ETEDVMELLEEDLTCPICCSLFDDPRVLPCSHNFCKKCLEGILE GSVRNSLWRPVFPKCTCRKKTFSYWELIPLQVNYSLKGIVEKY NKIKISPKMPVCKGH\LGQPLNIF\CL\TDMQLDL\CGIC\ATR GEHTKHVFCSDIADAYAQERDAFESLQSFETWRRGDALSRLDTL ETSKRKSLQLLTKDSKVKFEFEKLQHTLDQKNEILSDFTMK LAVMOAYDPEINKLNTILOEQRMFNIABAFKDVSEPIVFLQOM QEFREKIKVIKETPLPPSNLPASPLMKNFDTSQWEDIKLVVDVK LSLPQDTGTFTISKIPWSFYKLELLILLGLVIVFGPTMFLWSL FDDLATWKGCLSNFSSYLTKTADFIEQSVFYWEQVTDGFFIFNE RFKNFTLVVLNNVAEFVCKYKLL |
| 6079 | 1586 | 141 | ATARDLGRCARRIDRVVMESTPSRGLNRVHLQCRNLQEFGLGSLP GVLDRLYGHPATCLAVFRELP SLAKNWVMRMLFLEQPLPQAAVA LWVKKEFSKAQEESTGLSLGLRIWHTQLLPGGLQGLILNPIFRQ NLRIALLGGGKAWSDDTSQLGPDKHARDVPSLDKYAEERWEVVL HFMVGSPSAAVSQDLAQLLSQAGLMKSTEPGEPPCITSAGFQFL LLDTPAQLWYFMLQYLQTAQSRGMDLVEILSFLFQLSFSTLQKD YSVEGMSDLSLNLFLQHLREFGLVFORRRKRSRYPT/RALAINL SSGVSGAGSTVHQPGFIV\VETNYRLYAYTESELQIALIALFSE MLYPPF\NMV\ARVTR\ESVQQAASGITAQIIHFLRTRAHP VMLKQTPVLPPTITDQIRLWELERDRLEFTEGVLYNQFLSQVDF ELL\LAHAPKLGVLVFE\NTPAKRLMVVTPAGHSVDRKFWKQK HSS |
| 6080 | 1 | 1199 | LETIDHVGEPAMAAQAAGVSRQRAATQGLGSNQNALKYLGQDPK TLRQQCLDSGVLFKDPEFPACPSALGYXDLGPGSPQTQGIWKR PTCLCPSPQFIVGGATRTDICOGLGDCWLLAAIASLTLEELL YRVVPRDQDFQENYAGIFHFQPLCPPS\FWQYGEWVEVVIDDR LPTKNGQLLFLHSEQGNFWSALLEKAYAKINGCYEALAGSTV EGFEDFTGGISEFYDLKKPPANLYQIIRKALCAGSLGCSIDVY SAAEAETISQKLKSHAYSVTGVEEVNFQGHPEKLIIRLRNPWG EVEWSGAWSDDAPEWNHIDPRRKEELDKKVEDGEFWMSLSDQFV QFSRLIEICNLSPDSLSEEVHKWNLVLFNGHWTRGSTAGCCQNY PGSS |
| 6081 | 3 | 865 | EMLPLLLPLPLLWA/GALAQDARFRLEMPESVTVQEGLCIFVHC SVFYLEYGKWDSTPAYGHWFRGVSDQETPVATNNSTQKVQKE TQGRFHLLGDPNRNCSLSIRDARRRDNGSYFFWVARGRTKFSY KYSPLSVYVTALTHRPDILIPFLKSGHPSNLTCSPVPWVCEQGT PPIFSWMSAAPTSLGPRTLHSSVLTIIIPRQDHGTNLIQVTFP GAGVTERTIQLSVSWKSGTVBEVVVLAVGVVAVKILLCLCLI ILSFHKKKAVRAVEVENYVAVMG |
| 6082 | 283 | 1288 | EARSPGPTQTRTAPGLAAGLAQPAALRLLSRPPSAAMDGDGD PESVGQPEEASPEEQPEEASAEERPEDQEEEEAAAA\Y\LDE LPEPLLA/LRVLAALPRHE\LVQACR\LVCLRWKELVDGAPLWL LKQOQEGLVPEGGVEERDHWQFYFLSKRRRNLLRNPCGEEDL EGWCDVEHGGDGWRVEELPGDSGVEFTHDESVKYFASSFWCR KAQVIDLQAEGYWEELEDTTQPAIVVDKWSYSGRSDAGCLYBLTV KLLSEHENVLAEFSSQVAVPQDSGGGWNIEISHTFTDYGPQVVR FVRFEHGGQDSVYWKGFVGARVTNSSVWVEP |
| 6083 | 1865 | 309 | KQWCAERRGLGMSLADELLADLEAAEEBEGGSYGEEEPATE |

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|------------|--|--|---|
| | | | DVQEEETQLDLSGDSVKTI AKLWDSKMF AEIMMKIEEYISKQAKA SEVMGPVEAAPEYRVI VDANNLTVEIENELNIIHKFIRDKYSKR FPELES LVPNALDYIRTVKELGNSLDCKKNENLQQLTNTATIM VVSVTASTTQGGQLS EEEELERLEEACDMALELNASKHRIEYVE SRMSFIAPNLSIIIGASTAAKIMGVAGGLTNLSKMPACNIMLLG AQRKTL SGFSSTSVLPHTGYIYHSDIVQSLPPIPPPFSVAP\DL RRKAARLVAAKCTLAARVDSFHSTEGKVGVELKDEIERKFDKW QEP PPVKQVKPLPAPLDGQRKKRGRRYRKMKERLGLTEIR\KQ ANRMSFGEIEEDAYQEDLGFS LGHLGKSGSGRVRQTQVNEATKA RISKT LQRTLQKQSVVYGGKSTIRDRSSGTASSVAFTPLQGLEI VNPQAAEKKVAEANQKYFSSMAEFLKVKGEKSGLMST |
| 6084 | 1865 | 309 | KQWCAERRGLGMSLADELLADLEAAEEEGGSGYEEEEEPAIE DVQEEETQLDLSGDSVKTI AKLWDSKMF AEIMMKIEEYISKQAKA SEVMGPVEAAPEYRVI VDANNLTVEIENELNIIHKFIRDKYSKR FPELES LVPNALDYIRTVKELGNSLDCKKNENLQQLTNTATIM VVSVTASTTQGGQLS EEEELERLEEACDMALELNASKHRIEYVE SRMSFIAPNLSIIIGASTAAKIMGVAGGLTNLSKMPACNIMLLG AQRKTL SGFSSTSVLPHTGYIYHSDIVQSLPPIPPPFSVAP\DL RRKAARLVAAKCTLAARVDSFHSTEGKVGVELKDEIERKFDKW QEP PPVKQVKPLPAPLDGQRKKRGRRYRKMKERLGLTEIR\KQ ANRMSFGEIEEDAYQEDLGFS LGHLGKSGSGRVRQTQVNEATKA RISKT LQRTLQKQSVVYGGKSTIRDRSSGTASSVAFTPLQGLEI VNPQAAEKKVAEANQKYFSSMAEFLKVKGEKSGLMST |
| 6085 | 2 | 1456 | SGPRSFQGNRAVGRISLGCKRNPEVTLLPGVSSERVRRRRARV GVARVKPGNPWKPSPATQVPR/VPAQVYLPGRGPPPLRGEELVM DEEAYVLYHRAQTGAPCLSFDIVRDHLGDNRTLP LTLYL CAGT QAESAQSNRLMMLRMHNLHGTPKPPSEGSDEEEEDDEDEER KPQLELAMVPHYGGINRVRVSWLGEEPVAGVWSEKGVQVEPALR RLLQVVEEPQALAAFLRDEQAQMKPIFSFAGHMGEFALDWSPR VTGRLLTGDCQKNHILWTPTDGGSWHVDQRPVFGHTRSVEDLQ SPTENTVFASCSADASIRIWDIRAAPSKACMLTTATAHDGDVNV ISWSRREPFLLSGGDDGALKIWDLRQFKSGSPVATFKQHVAPVT SVEWHPQDSGVFAASGADHQITQWDLG/IVERDPEAGDVADPG LADLPQQLLFVHQGETELKELHWHWPQCPLLSTALSGFTIFRT ISV |
| 6086 | 2419 | 1357 | GAATQHGGAMNLLPCNPHGNGLLYAGFNQDHGCFACGMENGRV YNTDPLKEKEKEQFLEGGVGHVEMLFRCNYLALVGGGKKPKYPP NKVMIWDDLKKKTVEIEFSTEVKAVKLRR\DKIVVVLDSMIKV FTFTHNP\HQLHVFE\TCYNPKGLCVLCPNSNLSLAFPGTHTG HVQLVDLASTEKPVDIPAHEGVLSIALNLQGTRIATASEKGT LIRIPDTSSGHLIQELRRGSQAANIYCINFNQDASLICVSSDHG TVHIFAAEDPKRNKQSSLASASFLPKYFSSKWSFKQVPSGSP CICAFTGTEPNAVIAICADGSYYKFLFNPKGECIRDVYAQFLEMT DDKL |
| 6087 | 476 | 1877 | QNSQRTGLFITIFSRSPFLLTGSDLCENMPCTCTWRNWRQWIRP LVAVIYLVSI VAVPLCVWELQKLEVG IHTKAWFIAGIFLLLT I PISLWVILQHLVHYTQPELQKPIIRILWMVPIYSLDSNIALKYP GIATYVDTCRECYEAYVIYNFMGFLTNLYLTNRYPNLVLILEAKD QQKHFPPLCCCPFWAMGEVLLFRCKLGVLQYTVVRPFTTIVALI CELLGIYDEGNFSFSNAWTLV IINNMSQLFAMYCLLLFYKVLK EELSPIQPVGKFLCVKLVVFSFWQAVVIALLVKGVISEKHTW EWQTVEAVATGLQDFIICIEMLAAIA\HHYTFSYKPYVQEAEE GSCFDSFLAMWDVSDIRDDISEQVRHVGRTVRGHPRKCLFPEDQ DQNEHTSLLSSSSQDAISIASSMPPSPMGHYQGFGHTVTPQTTP TTAISDEILSDTIGEKKEPSDKSVDS |
| 6088 | 1684 | 689 | GASGLVRLQLQGHRCCLAPVAPKLVPPVGVKKGFRAAFROKE LERQRLRLRCPPPVRRSEKPNWDYHAETQAFGHRQLQENFSLDLL KTAFFVNSCYIKSEAKRQQLGIEKEAVLLNLKSNQELSEQGTSF SQTCLTQFLEDEYPMPTTEGINKLVDFLTGEEVCHVARNLAVE QLTLSSEFPVPAVLQQTFFAVIGALLQSSGPRTALFIRDFLI TQMTGKELFEMWKIINPMGLLVEELKKNRVSAPESRLTRQSG\A |

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|------------|--|--|---|
| 6089 | 3 | 3054 | PTALELYFVGLYCDKLLIABGPGETVLVAEEAARVALRLKLYGF TENRRPWNYSKPKETLRAEKSITAS TRLGIPGSTISSRPLCALAAEGHFLGHSWTGSRAGAHTGAPAW PSRRRLDLPAGGMWRLRRRAVACEVCQSLVKHSSGIGKSLPLQK LHLVSRSIYSHHPTLKLQRPQLRTSFQOQSSLTNLPLRLKFS PIKYGVQPRRNFWPARLATRLKLRLYLILGSAVGGGYTAKKTFD QWKDMIPDLSEYKWIVPDIWWEIDEYIDFEKIRKALPSSSEDLVK LAPDFDKIVESLSLLKDFFTSGSPEETAFRATDRGSESDKHFRK VSDKEKIDQEQELLHTQLKYQRIERLEKENKELRLKLVQKDD KGIPPFIESLRKSLIDMYSEVLDVLSYDASINTQDHLPRVVVVG DQSAGKTSVLEMIAQARIIPRGSGEMMTRSPVKVTLSEGGPHVA LFKSSREFDLTKEEDLAALRHEIELMRKKNVKEGCTVSPETIS LNVKGPGLQRMVLDLPGVINTVTSGMAPDTKETIFSISKAYMQ DPNAIILCIQDGSVDAERSIVTDLVSQMDPHGRTTIPVLTQVDL AEKNVASPSRIQIIEGKLFPMKALGYFAVVTGKNSSESIEAI REYEEFFQNSKLLKTSMLKAEQVTNRNLSLAVSDCFWKMVRES VEQQADSFKATRFNLETWKNKYPRLRELDRELFEKAKNEILD EVISLSQVTPKHWEETLQOQLWERVSTHVIENIYLPAAQTMNSG TFNTTVDIKLKQWTDKQLPNKAVEVAVETLQEEFSRPMTEPKGK EHDDIFDKLKEAVKEESI KRHKWDFAEDSLRLVQHNALEDRSI SDKQOWDAAIYFMEELQARLKDTEENAIENMVGPD\WKRWLYW KNRTQEQCVHNETKNELEKMLKCNEHPAYLASDEITTVRKNE SRGVEVPSLIKDTWQVYRRHFLKTALNHCNLCRRGFYFYQRH FVDSELECNVLFWRIOQLAITANTLRQQLTNTTEVRRLEKNV KEVLDFADGEEKIKLLTGKRVQLAEDLKVKVREIQEKDAFIE ALHQEK |
| 6090 | 194 | 1560 | PVFVPAPGAVLEQAS/ASPPLATQTVVPLQHQCKIPPLVQASTL FELQLFFCOLIALFVHYINYKTUWWYPPSHPPSHTSLNFHLID FNLLMVTIIVLGRFVIGSIVKEASQRGKVSILFRSILLFLTRFTV LTATGWSLCRSLIHLFTYSFLNLL/FPLLSVWDVHVSVPAAELR P\RKTSLEFNHMASMGPREAVSGLAKSRDYLLTLR\RRGSSTQDS CMARTPCP/PHACCLSPSLIRSEVFLKMDFNWRMKEVLVSSML SAYYVAFVVPVWFVKITHYDKRWSCEFLFLVSISTSVILMQHLL PASVCDLLHKAHAHLGCWQKVDPALCSNVLQHPWTEECMWPOGV LVKHSKNVYKAVGHYNVAIPSDVSHFRFHFSSKPLRLINILL LEGAVIVYQLYSLMSSEKWHQITISLALILFSNYAFFKLLRDL VLGKAYSYSASPQRDLDRHFS |
| 6091 | 3279 | 412 | SSRTREMEKEEILRRQIRLLQGLIDDYKTLHGNAFPGTTPAASG WQPPTYHSGRAFSARYPRPSRRGYSSHHGSPWRKKYSLVNRPPG PSDFPADHAVRPLHGARGGQPPVPOQHVLEROVQLSQGNVVIK VKPPSKSGSASASGAQRGSLEEFEDTPWSDQRPREGEGEPGRQ LQPSRPTRARGTCSVEDPLLVQCKEPGKPRMVKS VGSVGS PRE PRRTVSESIVAVKASFPSALPPRTGVALGRKLGSVASCAPQ LLGDRRVDAGHTDQVPVPSGSGGPARPASGPROAREASLVVTCR TNKFRKNKYKWAASSKSPRVARRALSPRVAENVCKASAGMAN KVEKPLIADPEPKPRKPATSSKPGSAPS KYKNKASSPSASSSS SFRWQSEAGSKDHASQLSPVLSRSPSGD\RPVGHSGLKPLSGE TPLSAYKVKSRTKIIRRRGSTSLPGDKKSGTSPAATAKSHLSLR RRQALRGKSSPVLLKTPNKGLVQVTHRLCRLPPSRAHLPTKEA SSLHAVRTAPTSKVIKTRYRIVKKT PASPLSAPFFPLSLPSWRA RRLSLRSRLVNLRLFPVASGGGKAQPGSPWRSKGYRCIGGVLY KVSANKLSKTSQPSDAGSRPLRLTGRDLPAGSCSRSLASRAVQ RSLAIIRQARQRREKRKEYCMYNNRFGRCNRGERCPYIHDEKAV AVCTRFVGTCKTDTGTCFSSHVSKEKMPVCSYFLKGI CSNSN CPYSHVYVSRKAEVCSDFLKGICPLGAKCKKHTLLCPDPARRG ACPRGAQCQLLHRTOKRHSRRAATS PAPGPSDATARSVASHG PRKPSASQRPTRQT PSSAALTAATAVAAPPHCPGGSASPSSSKAS SSSSSSSSPPASLDHEAPSLQEAALAAACSNRLCKLPSFISLQS SPSPGAQPRVRAPRAPLT KD SGKPLHIKPL |
| 6092 | 143 | 3190 | AKAPPTGESSEPEAKVLHTKRLYRAVVEAVHRLDLILCNKTAQ EVFKPENISLRNKLREL CVKLMFLHPVDYGRKAEELLWRKVYYE |

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|------------------|---|--|--|
| | | | VIQLIKTNKKHIHSRSTLECAVRTHLVAGIGFYQHLLLYIQSHY QLELQCCIDWTHVTDPLIGCKKPVASGKEMDWAQMACHRCLVY LGDLSRYQNELAGVDTELLAERFYQALSVAPQIGMPFNQIGTL AGSKYYNVEAMCYLRCIQSEVSFEGAYGNLKRLYDKAAKMYHQ LKKCETRLKSPGKKRCKDKRLVNFMYLQSLQPKSSSVDSSEL TSLCQSVLEDFNLCLFYLPSSPNLSLASEDEEBEYESGYAFLPDL LIFQMVIICLMCVHSLERAGSKQYSAIAFTLALFSLVNHVNI RLQAELEEGENPVPAFQSDGTDEPESKEPVEKEEEDPDEPPVVT PQVGEGRKSRKFSRLSCLRRRRHPPKVGDDSDLEGFESDSSHD SARASEGSDSGSKSLEGGGTAFDAETDSEMNSQESRSDLEDME EEGTRSPTEPPRGRSEAPDSLNGPLGPSEASIASNLQAMSTQ MFQTKRCFR LAPTF SNLLQPTTNPHTSASHRPCVNGDVDPKPE PASEGSESESGESSGRSCRNERSIQEKLQVLMAGLLPAVKVF LDWLRTNPDLLIIVCAQSSQSLWNRLSVLLNLLPAAGELQESGLA LCPEVQDLLEGCELDPDLSLLLPEDMALNLPPLRAAHRFRNF DTRPPLSTLEESVVRICIRSFHFIA RLQGSILQFNPEVGI F VSLAQSEQESLLQQAQAQFRMAQBEARRNRLMRDMAQLRLQLEV SQLEGS LQQPKAQSAMS PVLVPDQALCHHLPVIRQLATSGRFI VII PRTVIDGLDLLKKHHPGARDGIRYLEAEFKKGNRYIRCQKE VGKSFERHKLKRDADAWTLTKILDSCQQLT\LAQGAGEDPSG MVTIITGLPLDNPSLLSGPMQAALQAAAHASVDIKNVLDIFYKQW KEIG |
| 6093 | 76 | 1002 | ACGRRAMLALRVART/SRWGAL\RGAVWAPGTRPSKRRACWALL PPVPCCLGCLAERWRLRPAALGLRLPGIGQRNHCAGAKAAR\ PAAGAGAAAEAPGGQWGPASTPSLYENPWTIPNMLSMTRIGLAP VLGYLIIIEEDFNIALGVFALAGLTDLLDGFIA RNWANQRSALGS ALDPLADKILISILYVSLTYADLIPVPLTYMIISRDMVLEAAVF YVRYRTLPTPRTLAKYFNPCYATARLKPTFI SKVNTAVQLILVA ASLAAPVFNYADSIYQLIWCPTAFTTAASAYSYYHYGRKTVQV IKD |
| 6094 | 23 | 1010 | PFLRCLRGDQKARMSERKVLNKYPPDFDPSKIPKLLPKDRQY VVRLMAPFNMRCCTCGEYIYKGGKFNARKETVQNEVYLGPIFR FYIKCTRCLAEITFKTDPENTDYTMEHGATRNFQAEKLEEBEEK RVQKEREDEELNNPMKVLENRTKDSKLEMEVLENLQELKDLNQR QAHVDFEAMLRQHRLSEBERRRQQQEDEQETAALLEEARKRRL LEDSDSEDEAAPSPLQPALRPNPTAILDEAPKPKRKVEVWEQSV GSLGSRPPLSRLVVVKKAKADPDCSNGQPQA/APHPRSPAEEQEG GQPYTPDAWRVLEPTGCI PGQ |
| 6095 | 1 | 1599 | TRGRAAERSRGRGHGFLGGGFA\SVVDYFPSED FYRCGYCKNES GSRNMGWAHSMTVQDYQDLIDRGWRRSGKYVYKPVMMNQTCPPQ YTIRCRPLQFQPSKSHKKVLKKMLKFLAKGEVPKGSCE\DEPMD STMDDAVAGDFALINKLDIQCDLKTLSDDIKESLESEGKNSKKE EPQELLQSQDFVGEKLSGSEPSHS |

TRADOCS:1416257.1(%CSH011.DOC)

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|------------|--|--|--|
| | | | VKVHTVPKPGKADLSKPPCKAKEIRKERKRLKLMQONPAGEL EGFOAQGHPPSLFPPKAKSNQPKSLEDLIFESLPENASHKLEVR VVRSSPPSSQFKATLLESYQVYKRYQMVIHKNPDDTPTESQFTR FLCSSLPEAETPPNGPDGCGVSGFHQQYWLGDGKIIAVGVVIDILPN CVSSVYLYDDPDYSFLSLGVYSALREIAFTRQLHEKTSQLSYYY MGFYIHSCPKMKYKGQYRPSDLLCPETVVMVPIEQCLPSLENSK YCRFNQDPEAVDEDRSTEPDRLQVFHKAIMPYGVYKKQKQDPS EBAAVLQYASLVGQKCSERMLLFRN |
| 6096 | 2277 | 575 | QVRRAALLSSAMEDSEALGFEHMGDPRLLQAVTDLGWSRPTLI QEKAIPLALEGKDLLARARTGSGKTAAYAIPLQLLLHRKATGP VVEQAVRGLVLVPTKELARQAQSMIQQALATYCARDVRVANVSAA EDSVSQRAVLMEKPDVVVGTPSRILSHLQDQSLKLRDSLELLVV DEADLLFSFGFEEELKSLCHLPRIYQAFMSATFNEDVQALKE LILHNPVTLKLQESQLPGPDQLQQFQVVCETEEDKFLLLYALLK LSLIRGKSLFVNTLERSYRLRLFLEQFSIPTCVLNGELPLRSR CHIIISQFNQGFYDCVIATDAEVLGAPVKGRGRGPKGDKASDP EAGVARGIDFHHVSAVLNFDLPPTPEAYIHRAGRTARANNPGIV LTFVLPTQEFHLGKIEBLLSGENRGPIILLPVQFRMEEIEGFYR CRDAMRSVTHQAIAREARLKEIKEBLLHSEKLYTFEDNPR\DLQ LLRHDLPPLHPAVVKPHLGHVPOYLVPALRGLVRPHKK\GRSCL PLVGRPREQSPRTHCAASSTKERNSDPQSPPEVVGELWS |
| 6097 | 1673 | 192 | APGTMSSGGKKSSFOITSVTTDYECGSGSGASDPPTFPQPTGPP PRLNPGESPDPGGKGTTPRNGSPFPGPASSRFRVVKLPHGLGEP YRRGRWTCVDVYERDLEPHSFGGLLEGIRGASGGAGGRSLDSRL ELASLGLGAPTTPSGLSQSGPTSWLRPPTSPGPQARSFTGGLGQ LVVPSKAKAEKPPLSASSPQQRFPPEPETGESAGTSRAATPLPSL RVEAEAGGSGARTPPLSRRKAVDMRLRMELGAPPEMGQVPLDS RPSSPALYFTHDASLVHKSPPDPFGAVAAQKFLSAHSMALISGHL DSDDSGSGSLVGIDNKIEQAMDVLKSHLMFAVREEVEVLKEQI RELAERNAALEQENGLRALA\SPEQLGSGAPPRGVPR\LGPPA PNGPFVLSLPSLTIVPLGLPLGASAAWPPPLMPALIVPVFPGVG VQALSNPGWSPGLPHLLIIIPSLDGGGEGFRTGRQQGAPGEBT QPPPSLPGTPOQ |
| 6098 | 168 | 1074 | NYCLRHRSPLEKDSSPGSSSTSLIKKQRETSPTIMRALKELD EGKIFKNWGTQTEKEDTSNINPROTETS VNASRSPEKCAQQRQK RLNSASQRSSSLPPSNRKSSTPTKREIMLTPVTVAYS PKRSPKE NLSPGFSHLLSKNESSPIRFDILLDDLDTPVPSTLQRTNPRKQL \QFLPLDDSEEK\TYSEKAT\DNIVNHSSCPEPVNGVKKVSVR TANEKNKSVSVEQCKPVSVTPQGNDFEYTAKIRTLAETERFF\D ELTKEKDQIEAALS RMPSPGGRITLQTRLNQEAFGRSFGKD |
| 6099 | 168 | 1074 | NYCLRHRSPLEKDSSPGSSSTSLIKKQRETSPTIMRALKELD EGKIFKNWGTQTEKEDTSNINPROTETS VNASRSPEKCAQQRQK RLNSASQRSSSLPPSNRKSSTPTKREIMLTPVTVAYS PKRSPKE NLSPGFSHLLSKNESSPIRFDILLDDLDTPVPSTLQRTNPRKQL \QFLPLDDSEEK\TYSEKAT\DNIVNHSSCPEPVNGVKKVSVR TANEKNKSVSVEQCKPVSVTPQGNDFEYTAKIRTLAETERFF\D ELTKEKDQIEAALS RMPSPGGRITLQTRLNQEAFGRSFGKD |
| 6100 | 2 | 713 | FVEVSGYRSRADPEPRGRDITMYAYLFKYIIGDTGVGKSCLLL QFTDKRFQPVHDLTIGVEFGARMVNI DGKQIKLQIWDTAGQBSF RSITRSYYRGAAGALLVYDITRHETFNHLTSWLEDARQHSSNM VIMLIGNKSDLESRRDVKREGEAFARE\HGLIFMETS AKTACN VEEAFINTAKEIYRKIQQLFDVHNEANGIKIGPQQSISTSVGP SASQRNSRDIGSNSGCC |
| 6101 | 1 | 1399 | FRGRANPLREVSHWLGCRRCVCSWSASWGRLPAL SARLSPLLAFR GKMVFPLSCAVQQYAWGKMGSNSEVARLLASSDPLAQIAEDKPY AELWMGTHPRGDAKILDNRISQRTLSQWIAENQDSLGSKVKDTF |

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|------------|--|--|--|
| | | | NGNLPFLFKVLSVETPLSTQAHFNKELAEKLLQAPQHYPDANH KPEMALALTPFQGLCGFRPVEEIVTFLKKVPEFQFLIGDEAATH LKQTMSHDSQAVASSLQSCFSLMKSEKKVVVEQLNLLVKRISQ QAAAGNNMEDIFGELLQLHQYQPGDIGCFAYFLNLLTLKPEGE AMFLEANVPHAYLKGDCVCEMACSDNTVRAGLTPKFIDVPTLCE MLSYPSSSKDRFLPLTRSQEDPYLSIYDPPVPDFTIMKA\BVP G\SVTEYKDLALDSASILLMVQGTVIASPTTPTQPIPLQGGVLF FGANESVSLKLTPEKDLLIFRACCLL |
| 6102 | 70 | 2415 | QTPQATLAANGAEDSRGGEMLPAGEIGASPAAPCCSESGDERKN LEEKSDINVTVLIGSKQVSEGTDNGDLPSYVSFAIEKEVGNLKL SLKKLDKLIBQRTVSKMQLEEQLTISSEIPKRIRSAKNAEES KQFLNQFLEQETHLFSAINSHLLTAQPMWDDLGTMSIQIEEIER HLAYLKWISQIEELSDNIQQYLMTNNVPEAASLTLSMAELDIKL QESSCTHLLGFMRAITVKFWHKILKDKLTSDFEILAQHLWPFIA PPQSQTVGLSRPASAPETYSYLETFLCQLLLQTSHELLTEPK\ HSQKNTLFLPPLLSS/WPIQVMLTFLQKRRFRVHFRGNRQTNVLS KPEWYLAQVLMWIGNHTEFLDEKIQPILDKVGSLSVNARLEFSRG LMMLVLEKLATDIPCLLYDDNLFCHLVDEVLLEFERELHSHVGYF GTFASCMHILSEETCFQRWLTVERKFPALQKMSMLSSEAAVWSQ YKIDITVDDEMKVDPDAETFMTELLLVITDRYKNLPTASRKQFLE LQKDLVDDFRIRLTQVMKEETRASLGFRYCAILLNAVNYISTVLA DWADNVFFLQLOQAALVFENNTLSKLQGLQSLAMESSVFDDM INLLERLKHDMLTRQVDHVFRVVKDAKLYKKERWLSLPQSSEQ AVMSLSSSACPLLLTLRDHLLQLEQLCFSLFKIFWQMLVEKLD VYIYQEIILANHFNEGGAAQLQFDMTRNLPLFLSHYCKRPNENYF KHKEACIVLNLNVGSALTAGKDVLPVQLQGSFPAT |
| 6103 | 207 | 2523 | ESNSTMITYLEFTQNEERDGVFRFSWNVFSSRLEATRMVVPVA ALFTPLKERPDLPPIQYEPVLCSRTTCRAVLNPLCQVDYRAKLW ACNFCYQRNQFPFSYAGISELNQPAELLPOFSSIEYVVLGRPQM PLIFLYVVDTCMEDEDLQALKESMQMSLSLLPPTALVGLITFGR MVQVHELGCESKSYVFRGTDLKSAQLQRLGLSKVPVTOAT RGPOVQPPPSNRFLQPVQKIDMNLTDLLGELQRPWPVPQGR PLRSSGVALSIAVGLLECTFPNTGARIMMFIGGPATQGGPMVVG DELKTPIRSWHDIDKDNAYVKKGTKHFEALANRAATTGHVIDI YACALDQGLLEMKCCPNLTGGYVMVGDSTNTSLFKQTFQRFVT KDMHGQPKMGFGGTLEIKTPR\BIKISGAIGPCVSLNSKGFVCS ENEIGTGGTCQWKICGLSPTTLAIYFEVVOHNAIPQGG\RG A\IQFVTQY\QHSSGQRRIRVTIARN\WADAQTQIQNIAASFD QEAAAAILMARLAIYRAETEEGPDVLRWLDRLIRLCQKFGYHK DDPSSFRFSETFSLYPQFMFLRRSSFLQVFNNSPDESSYYRHH FMRQDLTQSLIMIPIYLYAYSFSGPPEPVLLDSSSILADRILLM DTFFQILYHGETIAQWRKSGYQDMPEYENFRHLLQAPVDDAQE ILHSRFPMPRYIDTEHGGSQARFLLSKVNPSQTHNNMYAWGQES GAPILTDVSLQVFMHLLKLAIVSSAA |
| 6104 | 124 | 732 | KVSEYIILSKDKILFHALLMLVVLVSPWNSAARGVLRNYWERLLR KLQSRPGFPSPWGPALAVQ\AQPCLOSQQMIPVEVKRI/RSL LDSIFWMAAPKNRRTIEVNRCCRNRNPQKLIKVKNNIDVCECGH LKQKHVLCAVCYKVKCTAEIRRIQIGKEGGPFKAPTITETVVL YTGETPSEQDQGR I IERDRKRPSWFTQN |
| 6105 | 3 | 989 | PLHGACTSLVLQRFCHRRPRPCAPARPEDMRRPAAVPLLLLLCF GSQRAKAATACGRPRMLNRMVGGQDTQEGEWFPQVSIQRNGSHF CGGSLIAEQWVLTAAHCFRNTSETSLYQVLLGARQLVQPGPHAM YARVRQVESNPLYQGTASSADVALVEAPVPFTNYILPVCLPD PSVIFETGMNCWVTGWGSPSEEDLLPEPRILQKLAVPIIDT\PR CNLLYSKDTFEGYQPKTIKNDMLCAGFEEGKKDACKGDSAGPLV CLVGQSWLQAGVISWEGGARQNRPGVYIRVTAHNNWIHRIIPK |

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|------------|--|--|--|
| 6106 | 3 | 1302 | LQVQPSEVGRPEVTTPGPGAP GRPPTAPHTGRPPTANRGDPRDLKRGCARLLTSIESRGRPAAS AGLRDRRCALRRWPLRRAPLARATRRRAGSPRRCAPRPRACPGQ WSRARHCQGGCLLLLLLLCQFMEDRSQAQGNCWLRQAKNGRCQV LYKTELSKEECCSTGRLLSTSWTEEDVNDNTLPKMWIFNGGAENC IPCKETCENVDCGPGKKCRMNKNKPRVCAPDCSNITWKGPPVC GLDGKTYRNECALLKARCKEQPELEVQYQGRCKTCRDVFCPGS STCV\VDQTNNAVCVTCNRICPEPASSEQYLCGNDGVTS\SAC HLRKATCLLGRSIGLAYEGKCIKAKSCEDIQCTGGKKCLWDFKV GRGRCSLDELCPDSKSDPEVCASDNATYASECAMKEAACSSGV LLEVKHSGSCNSISEDTEEEDEEDQDYSFPISILEW |
| 6107 | 623 | 168 | SRCSSPRPEPGRGRGK/LSPSEHRKWVEVFKACDEDHKGYSRE DFKTAVMVLFGYKPSKIEVDSVMSSINPNTSGILLEGFLNIVRK KKEAQRVYRNEVRHIFTAFDTYVRGFLTLEDFFKAFRQVAPKLE RTVLEVFREV\DRDS\DHVVSF |
| 6108 | 3 | 1348 | GGSLRFSPFRVPSCSRVCVPVPPGGCGLSPMSASRPQSPTTPW CLPRRYMKHKRDDGPEKQDEAVDTPVMTCVFVVMCCSMLVLL YYFYDLLVYVIGIFCLASATGLYSCLAPCVRRLP\SASAGESA LLAPTIPNNSLPYFHKRPQARMLLALLFCVAVSVVWGVFRNEDQ WAWVLQDALGIAFCLYMLKTI RLPTFKACTLLLLVLFYDIFPV FITPFLTKSGSSIMVEVATGPSDSATREKLPMVLKVPRLNSSPL ALCDRPFSLGFGDILVPGLLVAYCHRFDIQVQSSRVYFVACTI AYGVGLLVTFVALALMQRGQPALLYLVPCTLVTS CAVALWRREL GVFWTSGGFAKVLPPSPWAPAPADGPQPPKDSATPLSPFPQPSSE PATSPWPAEQSPKSRSTSEEMGAGAPMREPGSPAESSEGRDQAQPS PVTQPGASA |
| 6109 | 1 | 1381 | CRSRAGAASGGAILLEGTKLRRQRVDTNKPLDPLVPSALRAAMLY LEDYLEMIEQLPMDLRDRFTREMRMDLQVQNDQLEQRVSEFF MNAKKNKPEWREEQMASIKKDYKKALEDADEKVQLANQIYDLVD RHLRKLQDLAKFKMELEADNAGITEILERRSLELDTSPSQPVNN HHASHTPVEKRKYNPSTSHHTTIDHIPEKKFKSEALLSTLTSDA SKENTLGCRRNNSTASSNNAYNVNSSQPLGSYNIGSLSSGTGAG GI\TMAAAQAVQATAQMKEGRRTSSLKASYEAFKNNDFQLGKEF SMARETVGYSSSSALMTTLTQNASSSAADSRSGRKSKNNKSSS QQSSSSSSSSSLSSGSSSTVVQEISQQTTVVPESDSNSQVDWT YDPNEPRYICNQVSYGEMVGCOTQDCPIEFHFGVGLTEAPK GKWCPCQCT\AAMKRGRSRHK |
| 6110 | 77 | 2464 | ACPSAATMSDQDHSMDMTAVVKIEKGVGGNNGGNGGGGAFSQ ARSSSTGSSSSSTGGGQESQPSPLALJAATCSRIESPENSNNS QGPSQSGGTGELDLTATQLSQGANWQIISSSSGATPTSKEQSG SSTNGSNGSESSKNRTVSGGYVVAAPNLQNNQVLTGLPGVMP NIQYQVIPQFQTVDGQQLQFAATGAQVQDGSQIQIIPGANQQ IITNRGSGGNI IAMPNLLQQA VPLQGLANNVLSGGTQYVTVNP VALNGNITLLPVNSVSAATLTPSSQAVTISSSGSQESGSPVTS GTTISSASLVSSQASSSSFTNANSYSTTTTTNMGIMNFTTSG SSGINSQGTTPQRVSGLQGS DALNIQQNQTSGGSLQAGQQKEGE Q\NQCTQAAPKSI.SRPQLVGGG\QALQ\AFQAAPLSGQTFTQ ISQETLQNLQLQAVPNSGPIIIRTPTVGPNGQVSWQTLQLQNLQ VQNPQAQTITLAPMQGVSLGQTSSTNTLTPIASAASIPAGTVT VNAAQLSSMPGLQTLNLSALGTSGIQVHP IQGLFLAIAANAPGDH GAQLGLHCAGGDGIHDDTAGGEEGENSPDAQPQAGRRTREACT CPYCKDSEGRSGDPGKKKQHI CHIQCGCKVYGKTSHLRAHLRW HTGERPFMCTWSYCGKRFTSRDELQRHKRTHTGEEKFACPECPK RFMRSDHLSKHIKTHQNKKGPGVALSVGTLPLDSGAGSESGT ATPSALITTNMVAMEAICPEGIARLANSIGINVKEGGQFCSPINT SANGF |

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|------------|--|--|--|
| 6111 | 1637 | 797 | RVDPRVRGAMAPWGKRLAGVRGVLLDISGVLYDSGAGGCTAAG SVEAVARLKRSRLKVRFCNTESQKSRAELVGQLQRLGFDISEQE VTAPAPAAQCILKERGLRPYLLIHGCV\ASEFDQIDTS/STPNC VVIADAGESFSYQNMNNAFQVLMELEKPVLSISLGKGRYYKETSG LMLDVGPYMKALEYACGIKAEVGGKPSPEFFKSALQAIGVEAHQ AVMIGDDIVGDVGGACQRCGRALQVRTGKFRPSEHHPEVKADG YVDNLAEAVDLLLQHADK |
| 6112 | 77 | 196 | MSSHKSFKSKRFLAKRQKPNRPILQWILKTNKIRHNWK |
| 6113 | 1779 | 567 | WEGRSWAACGVNLQGAWGERSGVRASESPGKRADVSWWSROL ETMVDHLANTEINSQRIAAVESCFGASGQPLALPGRVLLGEGVL TKECRKKAKPRIFFLNDILVYGSIVLNKRKYRSQHIIPLEBVT LELLPETLQAKNRWMIKTAKKSFVVSASATERQEWISHIECV RRQLRATGRPA\STEHAAPIWIPDKATDICMRCQTQTRFSALTRRH HCRKCRVVVCAECRQRFLRLSPKPVVVCSLCYRELAQAQRK EEABEQGAGVPRAASHLARPICGRPEVEMTMTPTRTTRAAGTATG PAWSSTPRGWGGLPSTADPRPAEHLSPQLHCPGPQEGSSRSR PGLRDPPIPWQVQRWGVALSGLPVVFCWTLCPYGFTAGNAFFPR KPQNTHRSW |
| 6114 | 818 | 246 | PTSRPRPSFGSPAMSWACVSAAPSSSWPASSSWPCSPRRCTR RRRCSPRCGLAAGSMCSCSPSWRCTPVFACWSPFPF\PAEQVQC GHLPPHADRRRLRLPVAAPARGPGPGHPAGPAGPRPARTPPASP HGQRPTVPAPPCLLAATEPTPSRPHQRWTRDRMLGRGSQVT GRPQWFLRGLVLFSL |
| 6115 | 324 | 71 | DVCGRVCAHPHYLIHMHICAHAC\IHTHAQLC/I TASHALAH SHLYTCMVMLTASHTPSHTPHPTAVHKEHRADVLRGTLTPLR |
| 6116 | 595 | 1430 | TGVMPGGRWHAA/ISSSGPVFEGARA/LQTVKKEEDESITYVQ AARPQTLNRPGQELFQQLFRQLRYHESGPLETSLRRLRELCRWW LRPDLVLSKAQILELLVLEQFLSILPGEELRVVWQLHNPESGEE/L WPCWRSRGTLMGHPGGTRALP\EPICALDGYRS/LRSAQIWSL ASPLRSSSALGDHLEPPYEIEARDFLAGQSDTPAAQMPALFPRE GCPGDQVTPTRSLTAQLQETMTFKDVEVTFSDQEWGLDSAQRN LYRDVMLENYRNMAISLGK |
| 6117 | 1433 | 222 | VGVFSPAPFCSWEVGGGGWTPGILKEGQGGRRTPLLLLATRTR GLLSLFPFAAMHPAAPPPLPVVVAAVLWGAAPTRGLIRATSDHNA SMDFAFLPALFGATLSQEGQLGFLVEAHPDNACSPAPPPAPV NGSVFIALLRFDNCFDLKVLNAQKAGYGAAVVHNVNSNELLNM VWNSEBIQQIWIPIPSVFIGERSSEYLRLALFVYEKGARVLLVDPN TPLGYLIPTGTIVGLLVLANGAVMIARCIQHRKRLQRNRLTK \EQLKQI\PTHDYQKGDQYDVCAICLDEYEDGDKLRVLPCHAY HSRCDPWLQTQRTKCPICKQPVHRGPGEDEQEETQGGQEGDE GEPRDHPASERTPLLGSSPTLPTSFGSLAPAPLVFPGPSTDPPL SPSSPVILV |
| 6118 | 1044 | 247 | STISCRACSTGATPGAQSHRSARGHAAGGKETAALGMERGKVKK KEKEKETQKEKIGEGREEKVKRKEVEQKIKQEKQEKQERRKKG EKEEKRTKQKETNKEKEQFKGQEEKGENKDSLTRTTPLEPLEK NKQILVLGLDGAGKTSVLHSLASNRVQHSVAPTQGFHAVCINTE DSQMEFLEIGGSKPFRSYWEMYLSN/ADSLARSFSVGFQDQSQP ITWKAKKYLHQLIAANPVLPLVVFANKQDLEAAYHITDIHEALA II |
| 6119 | 1217 | 462 | DPRFVTENTTKAPAQERTTQPRSSREGTLRSTMEYLSALNPSDL LRSVSNISSEFGRRVWTSAPPPQRPFRVCDHKRTIRKGLTAATR QELLAKALETLLNGVLTVLVEEDGTAVDSEDFQILLEDDTCLM VLQSGQSWSPTRSGVLSYGLGRERPKHSDIARFTFDVYKQNPRL DLFGLSNVKATFYGLYSMSCDFQGL\GPKKVLRELLRWTSTLLQ GLGHMLLGISSTLRHAVEGAEQWQKGRHLSY |

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|------------|--|--|---|
| 6120 | 785 | 179 | LERAGGGGLSSRALVGSAGCLSLVARANGKGLPRGRKEFVEAVR VRYVAFRYRTPRAVCLRLWSCRREVIMSGRGKQGGKVRKAKSR SSRAGLQFPVGRVHRLLRKGNYAERVGAGAPVYLAAYLEYLTAE ILELAGNAARDNKKTRIIPRHLQLAIRNDEELNKLKGKVTIAQG G\VLPNIAVLLPKKTESQKDEGANDP |
| 6121 | 1612 | 107 | FVRAQAGRSRQPVRRPFLGAGSRLRCRSCGRMEPLKVEKFATAN RGNGLRAVTPLRPGELLFRSDPLAYTVCKSGRGVUCDRCLLGKE KLMRCSQCRVAKYCSAKCQKAWPDHKKRECKCLKSCPKPRYPDS VRLGRVVFVKLMDGAPSESEKLYSYFDLESNINKLTEDKKEGLR QLVMTFQHFMRBBIQDASQLPPAFDLFEAFKVICNSFTICNAE MQEVGVGLYPSISLLNHSDFNCISVFNPHLLRAVRDIEVGE ELTICYLDMLMTSEERRKQLRDQYCFECD\CFRCQTQDKDAML TGDEQVWKEVQESLKKIEELKAHWKWEQVLAMCOAISSNSERL PDINIYQLKVLDCAMDACINLGLLEALFYGTTRTMEPYRIFFPF SHPVRGVQVMKVGKQLQHQGMFPQAMKNLRLAFDIMRVTHGREH SLIEDLILLE/AMRRQHQSILRRSQREIRRVSLNALLRSHT LCFVSCVNLSSYWKFCVVFV |
| 6122 | 2 | 2324 | RFRKMDGGAASQDESSAAAAAADSRMNNPSETSKPMSMESGDG NTGTQTNGLDFQKQPVVGGGAISTAQQAFLGHLHQVQLAGTSL QAAQSLNVQSKSNEESGDSQQPSQPSQPSVQAAIPOTQLMLA GGQITGLTTPAQQLLLQQAQAQALLAAVQQHSASQHSAA GATISASAATPMTQIPLSQPIQIAQDLQQLQQLQQLNLLQPFV LVHPTTNLQPA\QFIISQTPQGGQGLLQA\ONLLTQLPRSQAN LLQSQPRI\TLTSQPATPTCTIAATPIQTLQSQSTPKRIDTPS LEEP\SDLEELEQFAKTFKQRRIKLFT\QGDAGLAMVKLYGND FSPTTIFRFEALNLSFKNMCKLKLPLEKWLNDENLSSDSSLS PSALNSPGIEGLSRRRKRTSIEA\NIRVALEKSFLN\QKPTS EETIMADQLNMEKGVIRVWFCNRRQKEKRINPPSSGG\TSSSP IKAIFPSPSTSLVATTPSLVTSSAATTLTVSPVPLTSAAVTNLS VTGSDTTSNNATVISTAPPASSAVTSPSLSPSPSASASTSEA SSASETSTTQTTSTPLSSPLGTSQVMVTASGLQTA/AQLLPFKG AAQLPANASLAAMAAAAGLNPSLMAFSQFAAGGALLSLNPGTSL GALSPALMSNSTLATIQLASGGSLPITSLDATGNLVFANAGGA PNIVTAPLEFLNPQNLSTLSTNPVSLVSAASAGNSAPVASLHA TSTAESIQNSLFTVASASGAASTTTASKAQ |
| 6123 | 3 | 2944 | HLLHRWFQTDQMIFNTTGEFQLTEACPYLGTTHSEESRFGILHL HLQPLEMKRVGVVFTPADYGVKVTSLILIRNNLTVIDMIGVEGFG ARELLKVGGRLLPGAGGSLRFKVPSTLMDCCRQLKDSKQILSIT KNFKVENIGELPITVSSLKINGYNCOGYGFEVLDCHQFSLDPNT SRDISIVFTPDFTSSWVIRDLVLTAADEFRFTLNVTLPHLL PLCADVVPGPSWEESFWRLTVFFVSLSLGVLIAFQQAQYILM EFMKTRQRQNASSSSQNNGPMVDVISPHSYKSNCKNFLDTYGPS DKGRGKNCLPVNTPQSRIGNAAKRSFATYGHQSOKKHKCSVYYSK HKTSTAASSTSTTTEKQTSPLGSSLPAAKEDICTDAMRENWI SLRYASGINVNLOKNTLPLKNLLNKEENTLKNTIVFSNPSSECS MKEGIQTCMFPEKTDIKTSENTAEFKERELCPLKTSKKLPENHL PRNSPQYHQPDLPETISRKNNGNNQVVPVQNEVDHCENLKKVDTK PSSEKKIHKTSREDMFSEKQDIPFVEQEDPYRKKKLQEKREGNL QNLNWSKSRCTCRKNKKRGVAPVSRPPEQSDLLKLVCSDFERSELS SDINVRSWCIQESTREVCKADAETASSLPAAQREAEQYQKPEK KCVDFKCSDDSSDCGSSSGSVRASRGWSWSSTSSSDGDKKPM VDAQHFLPAGDSVSNQDFPSEAPISLNLSHNICNPMTGNSLPQY AEPSCPSLPAGPTGVEEDKGLYSPGDLWPTPPVCVTSSLNCTLE NGVPCVQIESAPVHNSFIDWSATCEGQFSSAYCFLELNDYNAPP EENMNYANGFPADVQTDFTIDHNSQSTWNTPP\NMPAS\WGNA QFPSSSRPYLKSTPKACLPMSSGLFGPI\WAP\QSDVYENCCPIN |

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|------------|--|--|---|
| | | | PTTEHSD/THMENQA\VVCKEYYPGF\NPFPRAYMNLDIWTTT\ANRANFPLSRDSSSYCGNV |
| 6124 | 1573 | 236 | SDEALRLAGERGMGRVQLFEISLSHGRVVVSPGEPLAGTVRVRLGAPLPFRAIRVTCIGSCGVSNNKANDTAWVVEEGYFNSSLADKGSLLPAGEHSFFQFLLPATAPTSFEGPFGKIVHQVRAAIHTPRFSKDHKCSLVFYILSPLNLNSIPDIEQPNVASATKKFSYKLVKTGSVVLTASTDRLRGYVVGQALQLHADVENQSGKDTSPVVASLLQKVSYKAKRWIHDVRTIAEVEGAGVKAWRRAQWHEQILVPALPQSALPGCSLIHIDYVLQVSLKAPEATVTLVPVFIGNIAV/NPCPSEPPARPGAASWGPPTGG\PSAPPQEEAEAAAGGPHFLDPVFLSTKSHSQRQPLLATLSSVPGAPEPCPDGSPASHPLHPLCISTGATVPYFAEGSGGPVPTTSTLILPPEYSSWGYPEAPPSEYQSCGGVEPSLTPE |
| 6125 | 1 | 904 | KTCPKLTCAFTVSVDPSCCRVCRGDGELSNEHSDGDI FRQPANREARHSYHRSHYDPPPSRQAGGLSRFFGARSHRGALMDSQASGTIVQIVINNKKHKGQVCVSNKGKTYSHGESWHPNLRAGFIVECVLCTCNVTKECKKIHCPNRYPCYKYPQKIDGKCCXVCPG/KKAKEBLPGQSFNDKGYFCGEETMPVYESVFMEDGETTRKIALETERPPQVEVHVWTIRKGILOHFIKISKRMFEELPHFKLVTRTTLSQWKIFTEGEAQISQMCSRVCRTELEDLVKVLYLERSEKGC |
| 6126 | 1224 | 389 | RLLEAPFCPRRRRFQMNPEWQAFVHVAVAGGLCAVAVFTGIFDSVSVQVGYEHYAEAPVAGLPAPFLAMPFNSLVNMYATLLGLSWLHRGGAMGLGPRYLKDVFAAMALLYGGVQWLRLWTQWRRRAAVLDQWLTLPFAWFPVAVCLYLDGRWRP\WLFSLSECVSLASYGLALLHPQGFEVALGAHVVEAVGQALRT\HRHYG/SATPSATYALGVLVSLGFFVVLKLCDHQLARWRLFQCLTGHEWSKVCVQLQFHFAFLFLTHFNTHPRFHPSGGKTR |
| 6127 | 1335 | 463 | VLPRCLVFVVNTMDSREPTLGRDLAAGFVQVQWQRFDADEKGYIEEKELDAFFLHMLMKLGTDDTVMKANLHKVKQFMTTQDASKDGRIRMKELACMFLSEDENFLLFRRENPLDSSVEFMQIWRKYDADSSGFISAELRNFLRDLFLHKKATSEAKLEETGTMMKIFDRNKDGRDLNDLARILALQENFLQPKMDACSTEKRKGD FEKIFAYDVSKTGALGP\EVDGFVKMMELVQPSISGVLDLDFREILLRHCDVNDKGKIQKSELALCLGLKINP |
| 6128 | 2511 | 843 | TCRMSRRQLERWVWSSQQVQARGRNVRAPRLGKIAMGLEMSKDSFGSLDGRAWEDAQKQPSAWCGGRKTRVYATSSRRAPPSEGTRRGGAARPEKTABEGPPAAGSLRHSGLPGPHACPTALPEPQVTSAMSSQVVGIEPLYIKAPASPDSPKGSSETETEPVVALAPG\PAPTRCLPGHKEEEDGEGAGPGEQGGKLVLSLPLKRLCLVCGDVASGYHYGVASCEACKAFFKRTIQGSIEYSCPASNECEITKRRRKACQACRFTKCLRVMGMLKEGVRLDRVRGGRQYKRRPEVDPLFPFGPFAPGFLAVAGGPRKTAAPVNALVSHLLVVEPEKLYAMPDPAGPDGHLPAVATLCDLFDREIVVTISWAKSIGFSSLSLSDQMSVLQSVWMEVLVLGVAQRSLTLQDELAFAEYLVLEDEGARFAGLGLG\AALLQLVRLQLRLEREEYVLLKALALANDSVHIEDEPRLWSCEKLLHEALLEYEAGRAGPGGGAERRRAGRLLLTLP LLRQTAGKVLAHFYGVKLEGVPMHKL FLEMLEAMMD |
| 6129 | 1764 | 771 | ARFARSAHEGKMEKKKTGARKKAENRREREKQLRASRSTIDLAKHPCNASMECDKQRRQKNRAFCYFCNSVQKLPICAQCGKTKCMMKSSDCVIKHAGVYSTGLAMVGAICDFCEANVCHGRKCLSTHACAPLTDAC\VECERGVNDHGGRI FSCSFCHNFLCEDDQFEHQASQVLEAETFKCVSCNRLGQHSCLRKACFCDDHTRS KVFQKEGKQPPCPKCGHETQETKDLMSSTRSLKFGRTGTGEGDGASGYDAYWKNLSSDKYGDTSYHDEEEDYEAEDEDEEEDGRKDSDTESDLFTNLNLGRTYASGYAHYEEQEN |
| 6130 | 3 | 577 | GRGGMREYKVVVLGSG\GVGKSALT\QVVTCTFIEKYDPTIE |

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|------------|--|--|---|
| | | | DFYRKEIEV\DSPPSVAGISWTQQGTEQF\ASMRDLYIKKGQGC ILVYSLVNQQSFQ\DIKPMRDQIIIRVKVSEKVPVI\LVGN\SVD LESEREVSSSEGRALAEWGCFFMETSAKSKTMVDELFAEIVRQ MNYAAQPKDDPCCSACNIQ |
| 6131 | 3 | 1811 | SSPREKTSDDSHRPSRHGFLFLRLVGLSFFSYLCVPPSRPVPFGS PRSLSAMRLLPLAPGRLRRGSPRHLPSCSALLLLVLGGCLGVF GVAAGTRRPNVVLLTDDQDEVLGGMTPKKTALIGEMGMTFS SAYVPSALCCPSRASILTGRYPHNHVVNNTLEGNCSSKSWQKI QEPNTFPAILRSMCGYQTF\AGKYLNEYGAPDAGGLEHVPLGW SYWYALEKNSKYNYTSLINGKARKHGENYSVDYLTDLANVSL DFLDYKSNFEPFFMTATP\APHSPWTAAPQYQKAFQNVFAPRN KNFNIHGTNKHWRQAKTPMTNSSIQFLDNAFRKRWQTLSSVD DLVEKLVKRLFTGELNNTYIFYTSNGYHTQQFSLPIDKRQLY EFDIKVPLLVRGPGIKPNQTSKMLVANIDLGPITLIDAGYDLNK TQMDGMSLLPILRGASNLWRSVDLVEYQGEGRNVDTPTCSLS PGVSQCFFDCVEDAYNNTYACVRTMSALWNLQYCEFDQDEVFV EYVNLTAADPDQITNIAKTIDPELLGKNMYRLMMLQSCSGPTCRT PGVDFPGYRFDPRLMFSNRGSRVTRRFSKHL |
| 6132 | 96 | 1241 | AAGLLPPLGVPEDPRTRNLLPFGIQGPPFALSRLPFSVCSGW AWEAMEPEFLYDLQLPKGVEPPAEELSCKGKKKYLPTSRKD PKFEELQKPA\VLMEWINATLLPEHIVVRSLEEDMFDGLILHHL FQRLAALKLEAEDIALTATSQKHKLTVVLEAVNRS\CSWRSRGP SGA/WESI FNKDLLSTLHLLVALAKRFQPDLSLPTNVQVEVITI ESTKSGLKSEKLVQLETSYTDKDEPPKDVDELFLAKEKUNA VKBAIVNFVNQKLDRLGLSVQNLDTQFADGVILLLLIGQLEGFF LHLKEFYLPNSPAEMLHNVTALALEL/IGRGPAQLPC/LALK/ TLVNKDAKSTLRVLYGLFCKHTQKAHRDRTPHGAPN |
| 6133 | 2 | 4256 | FVHGSMADTDLFMECEEELEPWQKISDVIEDSVVEDYNSVDKT TTVSVSQPVSAFVPIAAHASVAGHLSTSTTVSSSGAQNDSSTK KTLVTLIANNAGNPLVQGGQFLILTQNPAPGLGTMVTPQVLR PVQVMQNAHVTSSPVASQPIFITTQGFVVRNVRPVQNAHNVG IVLNVQGGQTVRPITLVFAPGTQFVKPTVGVPQVFSQMTIPVRG STMPVRPTNTFTTIVPATLIRSTVPSQSQQTSTPTSTPTP TATQPTSLGQLAVQSPGQSNQTTNPKLAPSFPSPPAVSIASFVT VKRPGVTGENSNEVAKLVNTLNTIPSLGQSPGPVVVSNSSAH\ GSQRTSGPSSMKVTSSI PVFDLQDGGRIKCPRCNAQFRVTEAL RGHMCYCCPEMVEYQKKGKSLDSEPSVPSAAKPPSPEKTAPVAS /THPSSTP IPALSPPY/TKVPEPNENVGDAVQTKLIMLVDDFFY GRDGGKVAQLTNFPKVATSFRCPHCTKRLKNNIRFMNHMKHVE LDQONGEVDGHTICQHCYRQFSTPQQLQCHLVNHSPIESTTKC KICEWAFESEPLFLQHMKDTHKPGEMPYVCQVCYRSSLYSEVD VHFIRMIHEDTRHLLCPYCLKVFKNAGFQQHYMRHQKR\NVYH\ CNKCRVQFLFAKDKEHKLQHKHTRKPKQLEGLKPGTKVTIRA SRQQPRTPVPSSNDTPESALQEAAPLTSSMDPLVFLYPPVQRS IQKRAVRKMSVMGRQTCLECSFEIPDFPNHFPTTVHCSLCRYST CCSRAYANHMINNHVPRKSPKYLALFKNSVSGIKLACTSCTFVT SVGDAMAKHLVFNPSHRSSSILPRGLTWIAHSRHGQTRDRVHDR NVQNMYPSPSPFNKAATVKSAGATPAEPEZLLTPLAPALPSPA STATPPPTPTHPQALALPLATEGAECNLVDDQDEGSFVTOEPE LASGGGSGGVGKKEQLSVKLRVVLFCNTEQAAEHFRNPQ RRIRRWLRRFQASQGENLEGKYLSEAEKLAEWLQREQLP VNEETLFQKATKIGRSLEGGFKISYEWAVRFLRHHLTPHARRA VAHTLPKDAENAGLFDIVQRQIHNQDLPLSMIVAIDEISLFL DTEVLSDDRKENALQTVGTGEPWCDVLAAILADGTVLPTLVFY RGQMDQFANMPDSILLEAKESGYSDDEIMELWSTRVWQKHTACQ RSKGMLVMDCHRTLHSEVLAMLSASSTLPVAVPAGCSSKIQPL |

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|------------|--|--|--|
| | | | DVCIKRTVKNFLHKKWKEQAREMADTACDSDVLLQLVLVWLGEV LGVIGDCPELVQRSFLVASVLPDGNINSPTRNADMQEELIAS LEEQLKLSGEHSESSTPRPRSSPEETIEPESLHQLFEGESETES FYGFEEADLDLMEI |
| 6134 | 2 | 4256 | FVHGSMADTDLFMECEEEEELEPWQKISDVIEDSVVEDYNSVDKT TTVSVSQQPVSAFVPIAAHASVAGHLSTSTTVSSGAQNSDSTK KTLVTLIANNAGNPLVQGGQPLILTQNPAPGLGTMVTPVLR PVQVMQANHVTSSPVASQPIFITTQGFVVRNVRPVQANMQVG IVLNVQGGQTVRPITLVPAPGTQFVKPTVGVQVFSQMTFVRPG STMPVRPTTNTFTTVPATLTIRSTVPQSQQQTKSTPSTSTTP TATQPTSLGQLAVQSPGQSNQTNPKLAPSPFPSPAVS IASFTV VKRPGVTGENSNEVAKLVNTLNTIPSLGQSPGPVVVSNNSAH\ GSQRTSGPSSMKVTSSIPVFDLQDGRKICPRCNAQFRVTEAL RGHMCYCCPEMVEYQKKGKSLDSESPVSAKPPSPEKTAPVAS /THPSSTPIPALSPPY/TKVPEPNENVGDAVQTKLIMLVDDFY GRDGGKVAQLTNFPKVATSFRCPHCTKRLKNNIRFMNHMKHVE LDQQNGEVDGHTICQHCYRQFSTPFQLQCHLENVHSPYESTTKC KICEWAFESEPLFLQHMKDTHKPGEMPVVCQVCQYRSSLYSEVD VFRMIHEDTRHLLCPYCLVKFNGNAFQQHYMRHQKR\NVYH\ CNKCRVQFLFAKDKEHKLQHHKTFRKPQKLEGLKPGTKVTIRA SRGQPTVPVSSNDTPPSALQEAAPLTSSMDPLPVFLYPPVQRS IQKRAVRKMSVMGRQTCLECSFEIPDFPNHFFTYVHCSLCRYST CCSRAYANHMNNHVPKSPKYLALFKNSVSGIKLACTSCTFVT SVGDAMAKHLVFNPSHRSSSILPRGLTWIAHSRHGQTRDRVHDR NVKNMYPSPSPFNKAATVKSAGATPAEPEELLTPALALPSPA STATPPPTPTHQALALPPLATEGAECNLVDDQDEGSPVTQEP LASSGGGGSGVGKKEQLSVKLRVVLFCNCNTEQAAEHFRNPQ RRIIRLRRFQASQGENLEGKYLSEAEKLAEWVLTQREQQPL VNEETLFQKATKIGRSLEGGPKISYEWAVRFLMRHRLTPHARRA VAHTLPKDVAENAGLFIDFVQRQIHNQDLPLSMIVAIIDEISLFL DTEVLSSDDRKENALQVTGTEPWCDDVLLAILADGTVLPTLVFY RGQMDQPANMPDSILLEAKESGYSDDEIMELWSTRVWQKHACQ RSKGMLVMDCHRTSLSEVLAMLSASSLPAVVPAGCSSKIQPL DVCIKRTVKNFLHKKWKEQAREMADTACDSDVLLQLVLVWLGEV LGVIGDCPELVQRSFLVASVLPDGNINSPTRNADMQEELIAS LEEQLKLSGEHSESSTPRPRSSPEETIEPESLHQLFEGESETES FYGFEEADLDLMEI |
| 6135 | 2 | 4256 | FVHGSMADTDLFMECEEEEELEPWQKISDVIEDSVVEDYNSVDKT TTVSVSQQPVSAFVPIAAHASVAGHLSTSTTVSSGAQNSDSTK KTLVTLIANNAGNPLVQGGQPLILTQNPAPGLGTMVTPVLR PVQVMQANHVTSSPVASQPIFITTQGFVVRNVRPVQANMQVG IVLNVQGGQTVRPITLVPAPGTQFVKPTVGVQVFSQMTFVRPG STMPVRPTTNTFTTVPATLTIRSTVPQSQQQTKSTPSTSTTP TATQPTSLGQLAVQSPGQSNQTNPKLAPSPFPSPAVS IASFTV VKRPGVTGENSNEVAKLVNTLNTIPSLGQSPGPVVVSNNSAH\ GSQRTSGPSSMKVTSSIPVFDLQDGRKICPRCNAQFRVTEAL RGHMCYCCPEMVEYQKKGKSLDSESPVSAKPPSPEKTAPVAS /THPSSTPIPALSPPY/TKVPEPNENVGDAVQTKLIMLVDDFY GRDGGKVAQLTNFPKVATSFRCPHCTKRLKNNIRFMNHMKHVE LDQQNGEVDGHTICQHCYRQFSTPFQLQCHLENVHSPYESTTKC KICEWAFESEPLFLQHMKDTHKPGEMPVVCQVCQYRSSLYSEVD VFRMIHEDTRHLLCPYCLVKFNGNAFQQHYMRHQKR\NVYH\ CNKCRVQFLFAKDKEHKLQHHKTFRKPQKLEGLKPGTKVTIRA SRGQPTVPVSSNDTPPSALQEAAPLTSSMDPLPVFLYPPVQRS IQKRAVRKMSVMGRQTCLECSFEIPDFPNHFFTYVHCSLCRYST CCSRAYANHMNNHVPKSPKYLALFKNSVSGIKLACTSCTFVT |

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|------------|--|--|--|
| | | | <p>SVGDAMAKHLVFNPSHRSSSILPRGLTWIAHSRHGQTRDRVHDR NVKNMYPSPSFTNKAATVKSAGATPAEPEELLTPALAPLPSPA STATPPPTPTHPOALALPPLATEGAECNLVDDQDEGSPVTQPE LASGGGGSGGVGKKEQLSVKKLRVVLFALCCNTEQAAEHFRNPQ RRIRRWLRRFQASQENLEGGKYLSEAEKLAEWVLTQREQQLP VNEETLFQKATKIGRSLEGGFKISYEWAVRFLRHHLTPHARRA VAHTLPKDVAENAGLFIDFVQRQIHNQDLPLSMIVADEISLFL DTEVLSSDDRKENALQTVGTGEPWCDDVLAAILADGTVLPTLVFY RGQMDQFANMPDSILLEAKESGYSDDIMELWSTRVWQKHTACQ RSKGMVMDCHRTLSSEVLAMLSASSTLPAVVPAGCSSKIQPL DVCIKRTVKNFLHKKWKEQAREMADTACDSVLLQLVLVWLGEV LGVIDGCPVLVQSFVSVLPVLPDGNINSPTNRADMQEELIAS LEEQLKLSGEHSESSTPRPRSSPEETEPESLHQLFEGESETES PYGFEEADLDLMEI</p> |
| 6136 | 1704 | 539 | <p>PGVRMALEGMSSKRRKRSVQEGENPDDGVRGSPPEYRLGQVAS SLFRGEHHSRGGTGRLASLFSLEPQIQPVVVPVK\ESALASA DLEEEIHQKQGKRRKNSQPGVKVADRKILDDTETVVSQRKKIQ INQEEERLKNERTVVFVGNLPVTCNKKKLSFFKEYGGQIESVRFR SLIPAEGLSKKLAIAIKRKIHFDQKNINAVVVFKEESAATQALK RNGAQIADGFRIIRDVLASETSSRDKRSVFVGNLPYKVEESAIEK HFLDCGSIMAVRIVRDKMTGIGKGFYVLFENTDSVHLAKLNN SELMGRKLRVMRSVNKEKFKQONSFPRLKNVSKPKQGLNFTSKT AEGHPKSLFIGEKAVLLKTKKKGQKSGRPKKQKQKQK</p> |
| 6137 | 141 | 2656 | <p>RALRKRRCGPGRRGALGSGGPGPQRRPGRVPEERPAFPRERKHFG MWNMLIVAMCLA\LLGLFGKAQELQGHVS\IILAGEQLGLLAKK YLWQ\LFQLYLDEAGRGHSFSPHGAALTAPKQGQSLMAKALE LSCPKDMAPSHCAEHKQDLQLSQYRQLKTAEDYOALNKDIEAQ LQHAGLREAGGIFYFSVPPFAYEDIARNINSSCRPGPGAWLRVV LEKPFCHDHFSQAQLATELGTFQEEEMYRVVDHYLGKQAVAIL PFRDQNRKALDGLWNRHHVERVEIMKETVDAEGRTSFYEEYGV IRDVLQNLTEVLTAVAMELPHNVSSAEAVLRHKLQVFOALRGL QRGSADVQGYQSYSEQVRRELQKPDSEHSLTPTFAGVLVHIDNL RWEGVPFILMSGKALDERVGYARILFKNQACCQSEKHWAAQS QCLFRQLVFHGHGDLGSPAVLVSRLFRPSLSPSSWKEMEGPPG LRLFGSPLSDYYAYSFVRERDAHSVLLSHIFHGRKNFFITTENL LASWNFWTPLLSELAHKAPRLYPGGAENGRLDDEFSSGRLFFS QQQFEQLVPGGPGPMPSPDFQVLRKYRESSLVSANWSEELISKL ANDIEATAVRAVRRPGQPHALSGGSSPVALLFQQLATAHYGFPPW AHTHLWLVDERCVPVLPSPESNFQGLQAHLLQHVRIPIYNIH\AM PVHLQORLCAEEDQGAHIYAREISALGANSSFDLVLLGMGADGH TASLFPQSPPTGLDGEQLVLTTSFSPQPHRRMSLSLPLINRAKKV AVLVMGRMKREITTLVSRVGHPEKKWPISGVLPHSGQLVWYMDY DAFLG</p> |
| 6138 | 4587 | 934 | <p>EFSLKTLDRWQNAVQGVQRKGDVDGLVRQWQDFTTSVENLFRFL TDTSHLLSAVKQGERFSLYQTRSLIHELKKNKEIHFQRRRTTCAL TLEAGEKLLLTDLTKESVGRRIISQLQDSWKDMEPQLAEMIKQ FQSTVETWDQCEKKIKELKSRLQVLKAQSEDPPELHEDLHNEK ELIKELEQSLASWTQNLKELQTMKADLTRHVLVEDVMVLKEQIE HLHRQWEDLCRLVAIRKQIEIDRLNTWVVFNEKNKELCAWLQOM ENKVLQTADISIEEMIEKLQKDCMBEINLPSBNKLQKQMGDQL IKASNKSRAAEIDDKLNKINDRWQLHFDVIGSRVKKLKFAPFI QQLDKNMSNLRTWLARIESELSPVVDVCDQEIQRRLAEQQD LQRDIEQHSAGVESVFNICDVLHDSACANETECDSIQQTTRS LDRWRNINICAMSMERRMKIETWRLWQKFLDDYSRFEDWLKSAE RTAACFNSSEVLYTSAKEELKRFEAFQRQIHERLTQLELINKQY RRLARENRTDTASRLKQMVHEGNQRWDNLQRRVTAVLRLRHFT</p> |

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|------------|--|--|--|
| | | | NQREEFEGTRESILVWLTEMQLTNVEHFSSESADDDKMRQLNG FQOEITLNTNKIDQLIVFGEQLIQKSEP\LDVAVLIEDELEELHR YCQEVFGRVSRFHRRLTSCTPGLDEKEASENETDMEDPREIQT DSWRKRGESEEPSSPQSLCHLVAPGHERSGCETPVSVDS\IPLE WDHTGRRGFPSSSH\EEDEEAQYY\SALSGKSIDGHSWHVPDS PSCPEHHYKQMEGDRNVFPVPASSTPYKPPYKLLLPFGTDGG KEGPRVLNGNPQQEDGGLAGITEQQSGAFDRWEMIQAQEL\HNK LKIKQNLQQLNSDISAITTWLKKTEAELEMLKMAKPPSDIQEIE LRVKRLQELKAFDITYKALVVS VNVSSKEFLQTESPESTELQSR LRQLSLLWEAAQGAVDSWRGLRQSLMQCQDFHQLSQNLLLWLA SAKNRRQKAVTDPKADPRALLECRRELMQLEKELVERQFPQVDM LQEISNSLLIKGHGEDCIEAEKVVHVI\EKKLKQREQVSQDLM ALQGTQNPASPLPSFDEVDSDGQPPATSVAPRAKQFRAVRTTE GEEETESRVPGSTRPQRSFLSRVRAALPLQLLLLLLLACIL PSSEEDYSCTQANNF\ARSFYPMRLRYTNGPPPT |
| 6139 | 52 | 1131 | LGDVWVSRTCGVLETPTSVLRRARAGPCPTDSKWALPRLREGE TERRPWEASSWKT/LAGWIGGAASVIVGHPDVTVKTRLOAGVG YGNTLSCIRVVYRRESMFGFFKGMSPPLASIAVNSVVFVGSN TQRFLSQHRCEPEASPPRTLSDLLASMVAGVSVGLGGPVDL IKIRLQMOTPPVSGRQPRFEVQSGSGCG\EPAYQGPVHCITITV RNEGLAGLYRGASAMLLRDVPGYCLYFIPYVFLSEWITPEACTG RSPCAVWLAGGMAGAI SWGTATPMDVVKSRLOADGVYLNKYKGV LDCISQSYQKEGLKVFFRGITVNAVRFPMASAMFLGYELSLQA IRGDHAVTSP |
| 6140 | 594 | 136 | RPELELWRLRSRWRPLGVPRRCHRRNWKEPVRQAQPLSVTVWAP RCQRP/QPPAPEPSSPNAAVPEAIPTPRAAASAALEPLGPAV SVAPQAEAEARSTFGPAGSRGCPETFRQRFQRYQDAAGPREA FRQLREL/SPRQWLRPDI\RTKEQ\IVEMLVQEQLLAILPEAAR ARRIRRTDVIRITG |
| 6141 | 2 | 984 | AQVGPRSRPCKMPLKLRGKKAKSKETAGLVEGEPTGAGGGSLS ASRAPARRLVFHAQLANGSATGRVEGFSSIQELYAQIAGAFELS PSEILYCTLNTPKIDMERLLGGQLGLEDFFAHVKGIEKEVNVY KSEDSLGLTITDNGVGYAFIKRIKGGVIDSVKTCVGDHIESI NGENIVGWRHYDVAKKLKELKKEELFTMKLIEPKKAFIEIERSK AGKSSEKIGCGRATLRLRSKGPATVEEMPSETKAK\AIEKIDD VLELYMGIRDIDLATTMFEAGKDKVNPDEFAVALDETLDGFAPF DEFVFDVWGVIGDAKRGL |
| 6142 | 116 | 602 | EABGEQVCCGAKCCGDAPHVENREBEETARIGPGVMESKEERALNN LIVENVQENDEKDEKEQVANKGEPLALPLNVSEYCVPRGNRRR FRVRQPIQYRWDIMHRLGEPQARMREENMERIGEEVRQLMEKL REKQLSHSLRAVSTDPHHDHDEFC\LMP |
| 6143 | 2802 | 270 | FRMRIFLHCPWNQMMRWIWNLETSIESCKAHLISQKLLKER/Q \QLPVFKHRDSIVETLKRHRVWVAGET\GSGKSTQVPHFLLED LLNNEWASCKNIVCTQPRRISAVSLANRVCDLGCENGPGGGRN SLCGYQIRMESRACESRLLYCTTGVLLRKLQEDGLLSNV/HM FIVDEV\HER\SVQSDFLILKEILQKRSDLHLILMSATVDSE KFSTYFTHCFILRISGRSYPVEVFHLEDIEETGFVLEKDYCY QKFLSEEEVNTINVTSKAGGIKKYQEIYIPVQTGAHADLNPFYQK YSSRTQHAILYMNPHKINLDLLELLAYLDKSPQFRNIEGAVLI FLPGLAHIQQLYDLSNDRFYSEYKVIALLHSILSTQDQAAAF TLPPPGVRKIVLATNIAETGITIPDVVFVIDTGRTKENKYHES QMSSLVETVFSKASALQROGRAGRVRDGFRCFRMYTRERFEGFMD YSVPEILRVPLEELCLHIMKCNLGSPEDFLSKALDPPQLQVINS AMNLLRKIGACELNEPKLTPLGQHLAALPVNVKIGKMLIFGAIF GCLDPVATLAAVNTKSPFTTPIGRKDEADLAKSALAMADSDHL TIYNAYLGWKKARQEGGYRSEITYCRRNFLNRTSLLTLEDVKQE |

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|------------|--|--|---|
| | | | LIKLVKAAGFSSSTTSTSWEGNRASQTLSFQETALLKAVLVAGL YDNVGI IYTKSVDVTEKLACIVETAQGKAQVHPSSVNRDLQTH GWLLYQEKIRYARVYLRETTLITPFPVLLFGGDIQVQHRERLLS IDGWIYFQAPVKIAVIFKQLRVLIDSVLRRKLENPKMSLENDKI LQITELIKTENN |
| 6144 | 1289 | 568 | SGPGSMGSGQRVDVVMVLGKEYVGKTSLVERYVHDFLVGPYQN VSASGGARHGGRSGGPGVIC TYGPDLPFLVA \TIGAAFVAKVMS VGDRTVTLGINDTAGSEREYAMSRIYYRGAKAAIVCYDLTSSS FERAKFWVKELRSLEEGCQIYLCGTKSDLLEEDRRRRRVDFHDV QDYADNIKAQLFETSSKTGQSVDELQKVAEDYVSVAAFQVMTE DKGVDLGQKPNPYFYS CCHH |
| 6145 | 1109 | 196 | GGMDLSELERDNTGRCRLSSFPVAVCRKEPCVLGVDEAGRGFVL GPMVYAI CYCPLPRLADLEALKVADSKTLLESERERLFAKMEDT DFGWALDVLSPNLISTSM LGRVKYNLSLSHDTATGLIQYALD QGVNVTQVFVDTVGMPETYQARLQGSFPGIEVTVKAKADALYPV \VSAASICAKVARQAVKKWQFVEKLQDLTDYQ \SGYPNDPQD /TKAWLKEHVEPVF \GFP \QFVRF \SWRTAQTI \LEKEAEDVIR EDSASENQEGLRKITSYFLNEGSQARPRSSHRYFLERGLESTTS L |
| 6146 | 428 | 781 | LKKKGKEKAEAQVVEALPGPSLDQWHSRAGEEEDGPVLTDEQKS R/YPGHEAHDQGG \WDAROSI IRKVVDPETRTRLIKGDGEVLE EIVTKERHREINKQATRGCCLAFQMRAGLLP |
| 6147 | 1 | 2304 | GTRQLPPPSPGSGPGDSPEGPEGEAPERERRKAHGMKLKLYGLSE GEAGRPAAGPDPLDPTDLNGAHFDPVYLDKLRRECPLAQLMDS ETDVVRQIRALDSMQTLVYENYNKFISATDTIRKMKNDFRKME DEMDRLATNMVAITDPSARISATLQDRHERITKLAGVHALLRKL QFLFELPSRLTKCVELGAYGQAVRYQGRAQAVLQYQHLPSFRA IQDDCQVITARLAQQLRQRFREGGSGAPEQAECVELLLALGEP A EELCEEFLAHARGRLKELRNLEAELGPSPPAPDVLEFTHG \S SGFVGGLCQVAAAYQELFAAQGPAGAEKLAFAARQLGSRFYALV ERRLAQEQGGGDNLSLLVRALDRFHRLRAPGALLAAAGLADAAT EIVERVARERLGHHLQGLRAAFLGCLTDVVRQALAAPRVAGKEG GLAELLANVASSILSHIKASLAAVHLFTAKEVSFSNKPYPFRGEF CSQGVREGLIVGFVHSMCQTAQSFCDSPGEGKGATPPALLLLLS RLCLDYETATISYILTLTDEQFLVQDQFPVTPVSTLCAEARETA RRLTHYVKVQGLVISQMLRKSVETRDWLSTLEPRNVRAVMKRV VEDTTAIDVQVLPRLAGVALTQAGGTVP SRGAGAAEDHWQSLPG GDMCIWASHGASSVARASVREPQGNKSPRMNTKRAGECLCPRS CSFSAQDYDIFAPILPVEKQRLRVTEVRAGLVVLKIRPQTNS CILPLPHSTGSINSDHVPTK |
| 6148 | 3056 | 353 | VPAVGGTFADGANGAEKFFHYIYSCDLDINVQLKIGSLEGKREQ KSYKAVLEDPMLKFSGLYQETCSLDLYVTQVFAEGKPLALPVRT SYKAFSTRWNNEWLKLVPKYPDLP RNAQVALT IWDVYGP GKAV PVGGTTVSLFGKYGMFRQGMHDLKVWPNCRSQMDQKPTKT PGRT SSTLSEDMRLAKLTKAHRQGHMVKVDWLDRLTFREIEMINES VKRSSNFMYLMGGFRCVKCDDKEYGIVYVEKDGDESSPILTSFE LVKVPDPQMSLENLVESKHNLPRSLRSGPSDHDLPKYPSPRDQ LKNIVSYPPSKPPTYEEQDLVWEFRYLYLTNQDKALTKILTSVIW DLPQGAQALALLGKWKPMVDVEDSLELLSSHYTNPTVRRYAVAR LRQADDEDLLMYLLQLVQALKYENFDDIKNGLEPTKKDSQSSVS ENVSNSGINSAEIDSSQIIT /SAPFPSVSSPPP \ASKTKEVDPG ENLEQDLCTFLISRASKNSTLANLYWYVIVECEDQDTQQRDPK THEMILNVMRRF'SQALLKGDKSVRVMRSLLAQQOTFVDRLVHLM KAVQRESGNRKKKNERLQALLGDNEKMNLSDELIPLEPQVQK IRGIPETATLFKSALMPAQLFFKTEDGGKYPVIFKHGDDLRQD QLILQIISLMDKLLRKENLDLKLTPYKVLATSTKHGFMQFIQSV |

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|------------|--|--|--|
| | | | PVAEVLDTGEGSIQNFRRKYAPSENGPNGISAEVMDTYVKSCAGY CVITYILGVGDRHLDNLLLTKTGKLFHIDFGYILGRDPKPLPPP MKLNKEMVEGMSGTQSEQYQEFRKQCYTAFHLRRYSNLILNLF SLMVDANIPDIALEPDKTVKKVQDKFRDLDSDEEAVHYMQSLID ESHALFAAVVEQIHKFAQYWRK |
| 6149 | 1 | 1413 | RVDPRVRENGTANPIKNGKTSASPKDQRTGKKTSSVQGVQKQND ESESDPESDPPSPKSEEEEEQDDEVLQGEQGDNDDETEPENL GHRPLLMDSSEDEEEKHSSDSYEQAKAKYSMSVYRDRSGS GPTQDLNTILTSACLSSDVAVETPKQEFDFVGAVPFFAVRAQQ PQQEKNEKNLPQHRFPAAGLEQEEFDVFTKAPFSKKVNVQCEHA VGPEAHTIPGYPKSVDFVGFSTPFPFLTSTSKSESNEDLPLGLVP FDEITGSQQQKVKQRSLOKLSSRQRRTKQDMKSNKGRHGHGFT STKTKTLKPTYRTPERARRHKKVGRDSQSSNEFLTISDSKENIS VALTDGKDRGNVLQPEESLDDPFGAKPFHSPD\LSWHPP\HQGL S\DIRADHNT\VLPGR\PRONSLHGSFHSADVLMKDDFGAVP/F LTELVSQSIPTHQSSQSPV\ELDPFGAAPPFSKQ |
| 6150 | 372 | 37 | MSNIKKYIIDYDWKASIEIEIDHDMTEKHLQINNFWSDSEYR LNKHGSVLNAVLMLAQHALLIAISSDLNAYGVVCEFDWNGNG QEGWPPMDGSEGIRITDIDTSGIF |
| 6151 | 1555 | 521 | DSNQSVSGTAASLLHSEKATYYQGTGHVQQQFYGVTSPPYSQT TPIIVQSYAQPSLQYIQGQOIFTAHPQGVVQPAAVTIVAPG QPQPLQPSMNVNLLDLPPSPPKPKTIIVLPNNWKTARDPEG KIYYHVITRQTDWDPPTWESPGDDASLEHEAEMDLGTPTYDEN PMK\ASKPKTAEDTSSSELAKSKVEFRKEMSQFIVQCLNPYR KPDCVQ\RIITTEDFKHLARKLTHGVMNKLKVCNPE\DLCE NENVKHKTKEYIKKYMOKFGAVYKPKEDTEPRVTVGPGWEDGWS GKTDSESRKSCGPFCTPVSIVLLMIHHPGEFNPADVN |
| 6152 | 1366 | 648 | NRTWSTPSTWGMVALPFLCSTGFWPVTROITARTTCGAVPAKCP PWC/DVHEPRCQPPDCHGHGTCVDGHCQCTGHFWRGPGCDELDC GPSNCSQHGLCTETGCRCDAGWTGNSCSEECPLGWHGPGCQRPC KCEHHCPCDPKTGNCVSRSVKQLQPPPEATLRAGELSFFTRTAW LALTLALAFLLLLISTAANLSLLLSRAERNRRLHGDYAYHPLQEM NGEPLAAEKEQPGGAHNPFKD |
| 6153 | 2 | 3368 | GRVGARSPPRAYALLLLLCFNVGSGHLQLVLSRNNKLLPKH PHLVRQKRAWITAPVALLEGEDLSKNPIAKIHSDLAEERGLKI TYKYTGKGITEPPFGIFVFNKDTGELNVTSLDREETPFFLLTG YALDARGNNVEKPLELRKVLIDYNDNEPVFTQDVFGSVEELSA AHTLVMKINATDAEPNTLNSKISYRIVSLEPAYPPVFLNKTG GEIYTTSVTLDRREEHSSYTLTVEARDGNGEVTDKPVKQAQVQIR ILDVNDNIPVVENKVLGEMVEENQVNVETRIKVFDADEIGSDN WLANFTFASGNEGGEYFHIEDAQTNEGIVTLIKEVDYEEMKND FSVIVANKAAPHKSIKSKYKPTPIPIKVKVKNVKEGIFHKSSVI SIYVSESMDRSSKGQIIGNFOAFEDTGLPAHARYVKLEDRDNW ISVDSVTSEIKLAKLPDEFESRYVQNGTYTVKIVAISEDPKRTI TGTVLINVEDINDNCPTLIEPVQTIChDAEYVNVTAEDLDGHPN SGPFSSVIDKPPGMAEKWKIARQESTSVLLQQSEKLGRIEQ FLISDNQGFSCPEKQVLTITVCEVLHGS\GCREAQHDSYVGLGP AALALMILAFLLLLVPLLLLMCHCGKAGKGFPIPGTIEMLHP WNNEGAPPEDKVVPFSLPVDQGGSLVGRNGVGMKEATMKGSS SASIVKGQHEMSEMDGRWEEHRSLLSGRATQFTGATGAI\MTTE TTITARATGASRDVAGAAAVALEEFLKNYFTDKAASYTEED ENHTAKDCLLVYSQETESLNASIGCCSFIEGELDDRFLDDLGL KFKTLAEVCLGQKIDINKEIEQRQKPATETSMNTASHSLCEQTM VSENITYSSGSSFPVPSLQEAANAQVTKQIVTERTSVSSRQAQK VATPLPDPMASRNVIAETTSYVTGSTMPPTTVILGPSQPSLIV TERYAPASTLVDPQPYANEGTVVVTERTVIQPHGGSNPLEGTQH |

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|------------|--|--|--|
| | | | LQDVPYVMVRERESFLAPSSGVQPTLAMPNIAVGQNVTVTERVL APASTLQSSYQIPTENSMRTARNITVSGAGVGPPLPDFGLEESGH SNSTITTSSTRVTKHSTVQHSYS |
| 6154 | 3660 | 2146 | KKTKMKNTLQKTVNFGAWPKPTISDKSHLLQMVSKLDLTDKRN SDTAHIKSIETISILNGLQASESSAEDSEQBDERGAQDMNDNGK EESKIDHLTNNRNDLISKEEQNSSSLLEENKVHADLVISKPVSK SPERLRKDIEVLSEDDTYEDEVTKKRKDKVKKDTDKSSKPKQIK RGKRRYCNTECLKTGSPGKKEEAKNKESLCMENSNSSSSDED EETKAKMTPTKKYNGLEEKRSRLRTGFGYSGFSEVAKRIKIL NNSDERLQNGRAKDRKDVWSSIQQGWPKTKLKLFSDDTEAAA SPPHPAPEEGVAEESLQTVAAEESCSPSVELEKPPFVNVDSPKI EKTVEVNDKAEFPSSGSNFSA*IPPLYLHLNRLHQL*QKGS RQSSVTVSEPLAPNOBEVRSIKSETDSTIEVDSVAGELQDLQS ERE*LASRF*QCELEQ**SARTRTS*KSLYRSEKSEKSGRRK FIKKAEEKP*SNSGKQKQEGK |
| 6155 | 869 | 121 | HLLPELRGKSWITMKYVYFLGVLGAGTFFFDASSVQKEDPAPYLV YLKSHFNPCVGVLIKPSWVLAPAHCYLPNLKVMGNPKSRVRDG TEQTINPIQIVRYWNYSHSAPQDDMLILAKPAMLNPKVQALN P/PTTNVRPCTVCLLSGLDWSQENSGRHPDLRQNLAPVMSDRB CQKTEQGGKSHRSLCVKFKVFSRIFGEVAVATVICKDKLQIE VGHFMGGDVGITYNVYKYVSWIENTAKDK |
| 6156 | 5725 | 3984 | GTSTVIMATKKHFSITLNLGMLLKKDNQDTRKLLMTWALEVAV VMKSETYAPLFLPSFHKFCCKGLADTLVEDVNICLQACSSLH ALSSSLPDDLQRCVDVCRVQLVHRGTICIRQAFGKLLKSIPLGV FLSNNNHTEIQEISLALRSHMSKAPSNTHFPQDFSD/VISFIFY GNSHRTGKDKWLERLFYSQRLDKRDQSTIPRNLKTDVWLQW AIWAAQFTVLSKLRTPPLGRAQDTFOTIEGIIRSLAGHTLNPQ DVSQWTTADNDEGHGNNQLRLVLLQYLENLEKLMYNAYEGCAN ALTSPPKVIRTFLYTNROTQDWLTRLISIMRVGLLAGQPAVT VRHGFDLLTEMKTTSLSQGNELEVSIMMVVEALCEHLCPAIOG IAWSSSIVGKHLWINSVAQQAEGRFKASVEYQEHLCAMTGV DCCISSFDKSVLTLASAGCKSASLKHCLNGESRKSLSKPTDSS PEVINYLGNKACECYISTADWAAVQEWQNAIHDLKSTSTSLN LKADFNIKSLSSFESGKFVECTEQLELLPGENINLLAGGSKEK IDMKLLLRNM |
| 6157 | 946 | 329 | MANRGPSTGLSREVQEKTEQKYDADLENKLDVWITLQCAEDIEH PPGRAHFQKWLMDGTVLCKLINSLYPPGQEPKPKISESKMAFK QMBQISQFLKAAETYGVRTTDIFQTVDLWEGKDMAAVQRTLMAL GSVAVTDDGCGYRGEPSWFHRKAQONRRGFSEQLRQGNVIGL QMGSNKGASQAGMTGYGMPRQIM*DAASC |
| 6158 | 441 | 1482 | LGSILVLSLHCKYIFSSQSLERAMKEKAVDLVPTLAQNFGLAQN PILEGKDHNTGTGVDPIIDHVQDRKTD/SRSKSPHKRSKSRER RKSRSRSHSRDKRDKTREKIKERVKERKEREKEREKEREKE KERGNKDRDKREKREKDKREKEREKEREKEREKEREKEREKE QDKEKEREKDRSKEIDEKRRKDKKSRTPPRSYNASRRSRSSRE RRRRSRSSSRSPRTSKTIKRKSSSRSPSRNRKDKKREKERD HISERRERERSTSMRKSNDRDGKEKLEKNSTSLKEKHNKEPD SSVSKEVDDKAPRTEENKIQHNGNCQLNEENLSTKTEAV |
| 6159 | 53 | 84 | AVIAPLHISLGDARPYLKNTKSSSTTCSSRRNQSFPPVMSLTH RLHLCKYWGCAVSNVCRFWEGRPLPLMIVVPYTLFVSLFVGSV IITGTPILTFVKDPQLEVNFYTGMDSDIAFQFRLHFGHPAIM NSCVFGIWRYEKCYLPPEDGKPFELCIYVRHKEYKVMVNGQR IYNFAHRFPFASVKMLQVFRDISLIRVLISD*GRCVRITAVQEF DVSVCDCCTTAYQPG |
| 6160 | 1626 | 1790 | AGAKFFP*F*KVADAQPTSESEKETYQNVNVLKDAEGILEDLQS YRGAGHEIREAIQHPADEKLQEKAWGAVVPLVGKLLKIFYEFSQR |

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|------------|--|--|--|
| | | | LEAALRGILLGALTSTPYSPSTOHLEREQALAKQFAEILHFTLRFDELKMTNPAIQNDFSYRRILSRMRINNVPAGEVNEVNNELANRMSLFYAEATPMLKTLSDATTKFVSENKNLPIENTIDCLSTMASVCRVMLETPEYRSRFTNEETVSFCLRVVMGVIIILYDEVHPVGAFAKTSKIDMKGCIKVLKDQPPNSVEGLLNALRYTTKHLNDETTSSKQIKSMLQ*QLLTIVNKG |
| 6161 | 455 | 1569 | PVSGSESSLRRAWASILRLMLGPRVAVSILCEDGISH*LLEKH*KSHVLEPLSSSLALEBQCLALSLDWSTGKTGRAGDQPLKIISDSTGQLHLLMVNETRPRLOKVASWQAQFEAWIAAFNYWHPRIVYSGDDGLLRGWDTTRVPGKFLFTSKRHTMGVCSIQSSPHREHILATGSYDEHILLWDTRNMKQPLADTPVQGGVWRKWHFFHHLLLLAA CMHSGFKILNCQKAMEERQEATVLTSHLTLPDSLVYGADWSWLLFRSLQRAPSWSPFNLTGTADLKGASELPTPCHECREDNNDGEGHARPOSGMKPLTEGMRKNGTWLQATAATTRDCGVNPEEADSAFSL LATCSFYDHALHLWEWEGN |
| 6162 | 1 | 586 | RTIHATGRAGASPMHRLIVWRLAEANKQHVRCQKCLEFGHWTVECTGKRKYLHRPSRTAELKKALKEKENHLLQQSIGETNVERKAKKRSKSVTSSSSSSSDSSASDSSSESEETSTSSSEDSDTDESSSSSSSASSTSSSSSDSDSDSSSSSQ*HQHR*QL*R*TTKEE EKEIELLHSYWTGDKLTLM |
| 6163 | 1081 | 785 | RIRSTTEGCAVRLHPTQNTGKARIMILLSSVSLGRHWAFTYKFFLTPVVVFVFFFFPHRKE*VMQKNPMKREDEWMEKLNHLHVQRADMNRLIMNYLVTEGFKAAEKFRMESGIEPSVDLETDERIKIREMILKGQIQEALIALINSLHPELDTNRYLYFHLQOQHILIRQRETEAALFPAQTQLAEQGEESRECLTEMERTLALLAFDSPEESPFGDLLHTMQRQKVWSEVNQAVLDYENRESTPKLAKLLKLLWQNELDKKVKYPKMTDLSKGVIEPK |
| 6164 | 90 | 406 | PCQSPGRSRMRQDKLTGSLRRGGRCCLKRQGGGVGTILSNVLKKRSCISRTAPRLCTLEPGVDTKLKFTLEPSLGQNGFQQWYDALKAVARLSTGIPKEWRRKVWLTADHYLHSAIDWDKTMRTFNERSNPDDDSMGIIQIVKDLHRTGCSYCYGQEAQDRVVLKRVLLAYARNKTVGYCQGFNLAALILEVMEGNEGDAKIMYILDKVLPESYFVNNLRALSVDMAVFRDRLRMKLPESLQHLDTLQRTANKESGGGYEPPLTNVFTMQWFLTLFATCLPNQTVLKIWDSVPFEGSEIILRVSLAIWAKLGEQIECCETADEFYSTMGRLTQEMLENDLLQSHELMQTVYSMAFPFPQLAELREKYTYNITPPFATVKPTSVSGRHSKARDSDEENDPDDEDAVVNAVGLGPFSGFLAPELQYQKQIKEPNEEQSLRSNNIAELSPGAINSCRSEYHAAFNMMMERMTTDIN ALKRQYSRIKKKQQQVHOVYIRADKGPVTSILPSQVNSSPVIN HLLLGKKMKMTNRAAKNAVIHIPGHTGGKISVPYEDLKTCLNSPWRTHIRVHKKNMPRTKSHPGCGDTVGLIDEQNEASKTNGLGAAEAFPSGCTATAGREGSSPEGSTRRTIEGQSPPEPVFGDADVDSA VQAKLGALELNQDAAAETELRVHPPCQRHCPEPPSAPEENKATSKAPQGSNSKTPIFSPFPFSVKPLRKSATARNLGLYGPFTERTPTV HFPQMSRSFSKPPGGNSGP*KMVFSSGTMLSRQLPGYPQEQYQNGGERFG |
| 6165 | 90 | 406 | PCQSPGRSRMRQDKLTGSLRRGGRCCLKRQGGGVGTILSNVLKKRSCISRTAPRLCTLEPGVDTKLKFTLEPSLGQNGFQQWYDALKAVARLSTGIPKEWRRKVWLTADHYLHSAIDWDKTMRTFNERSNPDDDSMGIIQIVKDLHRTGCSYCYGQEAQDRVVLKRVLLAYARNKTVGYCQGFNLAALILEVMEGNEGDAKIMYILDKVLPESYFVNNLRALSVDMAVFRDRLRMKLPESLQHLDTLQRTANKESGGGYEPPLTNVFTMQWFLTLFATCLPNQTVLKIWDSVPFEGSEIILRVSLAIWAKLGEQIECCETADEFYSTMGRLTQEMLENDLLQSHELMQTVYSMAFPFPQLAELREKYTYNITPPFATVKPTSVSGRHSKARDSDEENDPDDEDAVVNAVGLGPFSGFLAPELQYQKQIKE |

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|------------|--|--|--|
| | | | <p>PNEEQSLRSNNIAELSPGAINSCRSEYHAAFNMMERMTTIDIN ALKRQYSRIKKKQQQVHQVYIRADKGPVTSILPSQVNSSPVIN HLLLGKKMKMTNRAAKNAVIHIPGHTGGKISPVYEDLTKTLNS PWRTHIRVHKKNMPRTKSHPGCGDTVGLIDBQNEASKTNGLGAA EAFPSGCTATAGREGSSPEGSTRRTIEGQSPPEVFGDADVDVSA VQAKLGALELNQRDAAATELRVHPPCQRHCPPEPPSAPENKAT SKAPQGSNSKTFIFSPFPVKPLRKSATARNLGLYGPTERTPTV HFPQMSRSFSKPGGGNSGP*KMVFSSGTMLSRQLPGYPQEQYQRN GGERFG</p> |
| 6166 | 2 | 1206 | <p>HKLWRTVAMAGAENKSLBECLEKHLPLDQLQEVKRVLYGKELRK LDLPREAFEAASREDFELQGYAFEAEEQLRRPRIHVGLVQNR IPLPANAPVAEQVSALHRRRIKAIVEVAMCGVNIICFEAWTMP FAPCTREKL PWTEFAESAEDGPTTRFCQKLAQNHDMMVVSPILE RDSEHGDVLTAVVISNSGAVLGKTRKNHPRVGDNESTTYM EGNLGHFPVFTQFGRIAVNICYGRHHLNWLMYSSINGABII FNP SATIGALSESLEWPIEARNAAIANHCFTCAINRVGTEHFPNEFTS GDGKKAHQDFGYFYGSSVVAAPDSSRTPGLSRSRDGLLVAKLDL NLCQQVNDVWNFKMTGRYEMYARELAEAVKSNYSPTIVKE*PAS VPALG</p> |
| 6167 | 1220 | 1844 | <p>YGIIVTGPSLCAGDKQPKQKQKPNVLVSPEFVDEALCACEEYLSN LAHMDIDKLEAPLYLTFEGWSLFLQRYQVVEGAELRHLDTQ VQRCEDILOQLQAVVPQIDMEGDRNIWIVKPGAKSRGRGIMCND HLEMLKL VNGNPPVMDGKQVWQKYIERPLLI FGTKFDLRQWF LVTDWNPLTVWFYRDSYIRFSTQPFSLKNLKD*APLYLTFEGWS LFLQRYQVVEGAELRHLDTQVQRCEDILOQLQAVVPQIDMEG DRNIWIVKPGAKSRGRGIMCNDHLEMLKL VNGNPPVMDGKQVW QQKYIERPLLI FGTKFDLRQWFLVTDWNPLTVWFYRDSYIRFST QPFSLKNLKD</p> |
| 6168 | 84 | 1392 | <p>VWVPSVSAMPKKQAQAGGSKKAEQKKKEKIIEDKTFLGKKNK GAKQKFIKAVTHQVKGQONPROVAQSEAEKLLKDDKKEKELQ ELNELFKPVVAAQKISKGADPKSVVCAFFKQGCQTKGDKCKFSH DLTLEKCKEKRSVYIDARDELEKDTMDNWEKLEEVVNNKKHG EASKKKPKTQIVCKHFLEAIENNKYGFVWVCPGGGDI CMYRHAL PPGFVLKKKKKKKKDEISL*DLIERERSALGNPVTKITLESF LAWKRRKQEKIDKLEQDMERRKADFKAGKALVISGREVFREFP ELVNDDEEADDTRYTQGTGGDEVDSVSNIDLSLYIPRDVD ETGITVASLERFSTYTSKDNKLEASAGGRAENGERSDLEEDN EREGTENGAI DAVPVDENLFTGEDLDELEELNTLDLEE</p> |
| 6169 | 112 | 662 | <p>APAAAMAERPEDLNL PNAVITRII KEALPDGVNISKEARSATSR AASVFLYATSCANNFAMGKRKTLNASDVLSAMEEMEFQRFVT PLKEALEAYRREQKKGKEASEQKKDKDKKTDSEEQDKSRDEDN DEDEERLEEBEQNEEEVDN*KGRETVAPWKVPLEMRATCFCE AFPCWAE</p> |
| 6170 | 62 | 667 | <p>STKVMLPNTGRLAGCTVFTIGASRGIGKAIKAAKDGANIVIA AKTAQPHPKLLGTIYTAABEIEAVGGKALPCIVDVRDEQQISAA VEKAIKKFGGIDILVNNASAI SLTNTLDTPTKRLDLMNVNTRG TYLASKACIPYLKKSXVAHIPNISPPNLNPNVWFKQHCGRW*VV G*GDGLCLICFELNLCMSDVITICT</p> |
| 6171 | 382 | 941 | <p>HFMQSDVELDCDIEPCGHTKFPPTLPLSTTVIVCSCHPVATAST MAEAFSKTTSEEDQSIQEPKEANSMTAQKQK*GLRGSRRRHAN SGGDIFGDSFAAYFPRVLQVHQALSLSQEAHSVMDSMVRDILD RIATEAGHLAHYSKCVTTITSRDIRMAVCLLLPGMKGLAESQGT NATLRYTKSK</p> |
| 6172 | 651 | 54 | <p>GLCRAGGAHRFSRTHVEAALKMLRREARLRREYLYRKAREBAQR SAQERKERLRRALEENRLIPTELRREALALQGSLEFDDAGGEGV TSHVDDEYRWAGVEDPKVMITTSRDPSSRLKMFALKL VFFPGA</p> |

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|------------|--|--|--|
| | | | QRMNRRHEVGALVRACKANGVTDLLVVEHRTGTPVGLIVSHLP FGPTAYFTLCNVVMRHDIPDLGTMSEAKPHLITHGFSSRLGKRV SDILRYLPFPVKDDSHRVTTFANQDDYISFRHHVYKKTDRHNV LTVGPRFELKLYMIRLGTEQEATADVWRWHPYTNTRARKRVF LSTE*AAPRLGQLL |
| 6173 | 3 | 288 | SVDRHEVQVLSQSMPLTPHQAVALRGERPYMCVECGKCFGRSSHL LQHQRIHTGKPYVCSVCGKAFSQSSVLSKHRTIHTGKPYECN ECGKAFRVSSDLAQHHKIHTGKPEHCLECRKAFTQLSHLQHQ RIHTGERPYVCPGKAFNHSTVLRSHQVHTGKPHRCNECGK TFSVKRTLLQHQRIHTGKPYTCSECGKAFSDRSVLQHHNVHT GKPYECSECGKTFSHRSTLMNHERIHTEEKPYACVECGKAFVQ HSHLQHQKVRKL*PTCVLSVGSALAGVPTSFSISVSTLERSP MCAVYVGRPSARAQSLVNTGQPTQVRSPMSVMSVEKPLE |
| 6174 | 1060 | 959 | PRPPKRWVAGLGNPGLPGTRHSVGMVGLQARRLGVAESWT RDRHCAADLALAPLGDALVLLRPRRLMNANGRSVARAAELFGL TAEVYLVDDELKPLGRALKLGGSSARGHNGVRSCISCLNSNA MPRLRVGIGRPAHPEAVQAHVLGCFSPAEQELLPLLLDRATDLI LDHIRERSQGPSLGP*H*WFSKKA |
| 6175 | 2204 | 334 | RYFRADPRSRSGQPRAEGLGAFAGPLRAMAAPVKGNRKQSTEG DALDPPASPKPAGKONGIQNPISLEDSPAGGEREEQEEREEQ AFLVSLYKFMKERHTPIERVPHLGFKQINLWKIYKAVEKLGAYE LVTGRRLLWKNVYNELGGSPGSTSGATCTRRHY*RLVLPYVRHLK GBDDKPLPSTSKPRKQYKMAKENRGDDGATERPKKAKEERRMDQM MPGKT*KAADAPAPLPSPQEPNRNSTEQQLASGSSVSFVGASGC PEAYKRLSSFYCKGTHGIMSPLAKKLLAQVSKVEALQCQEG CRHGAEPAQASPAVHLPSPQSPKGLTENSRLHLPQEGQLQAPGG SLREEAQAGPCPAAPIFKGCFTYHTPEVLKPVSQHPRDFSRLLK DGVLLGPPGKEGLSVKEPQLVVGDDANRPSAFHKGGSRKGLYP KPKACWVSPMAKVPASPTLPPTFPSSPGLGSKRSLEEEGAHNS GKRLRAVSFPLKEADAKCGKAPAGSGLVSCLLGPAALGPVPPPEA YRGTMLHCELNFTGTPGLKGQALPFSPLVIPAFAHFLATAG PSPMAAGLMHFPPTSFDSALRHRLCPASSAWHAPVTTYAAPHF FHLNTKL |
| 6176 | 1040 | 402 | PLSALRAMAEVHVIGQITIGASGFSESSLFCKWGIHTGAAWKLLS GVREGQTQVDTPIQIGDMAYWHPIDLHFATKGLQGWPRLLHFQVW SQDSFGRCQLAGYGFCHVPSSPGTHQLACPTWRPLGWSREQLAR AFVGGGPQLLHGDTIYSGADRYRLHTAAGGTVHLEIGLLLRNFD RYGVCEC*GTLPTSPPTPTPTSDGGGWHSQEHRL |
| 6177 | 1400 | 992 | VPISLVGKVHNFPLIAFYCCEKGRQPHKSLHRCFGEALDPN CSHCYLDQIKRSDFLGFSGYSPHFVAISTNSEHKMQPSSMQQAL PSQ*PYWTDPRPALVPCCSHRPDVHRSRPGPLPGTSGCSDRPP VCPI |
| 6178 | 1027 | 254 | STQGGIGKVARAASLVGRRRAGTGMALLCLVCLTAALAHGCL HCHSNFSAKFSFYRHVNFKSWWVGDI PVSGALLTDWSDDTMKE LHLAIPAKITREKLDQVATAVYQMDQLYQGMYPFGYFPNELR NIFREQVHLIQNAIESRIDCQHRGIFQYETISCNNCTDSHVA CFGYNCESSAQWKS AVQGLLNYINNWHKQDTSMRPRSSAFSWPG THRAAPAFVLVLPALRCLEPPHLANLSLEDA*CLKQH |
| 6179 | 806 | 276 | RGETREMAGNLLSGAGRRLLWDNVPLACRSFSLGVPRLLIGIRLTL PPFKVVDRWNEKRAMFGVYDNIIGLGNFEKHPKELIRGPIWLGR WKGNELQRCIRKRMVGSRMFADDLHNLNKRIRYLYKHFNHKGK FR*KRKLRTSEKAHLSPPWRRETVLFPVRKRLCIFSVIKWGFPGI |
| 6180 | 156 | 1833 | DHILKAAS*THVCARGNIPAIPTNTRCLEC*ATATPSSLEQCN* SHLSLCP*LPATTSGLTPNSMIPKERNQIAERLLRVMCADLGA SVVSGKEFLKLAQTLVDSGARYGAFSVTEILGNFNTLALKHLPR MYNQVKVKTALGSAACLGIGVTCHSQSVGPDSCYILTAYQAE |

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|------------|--|--|--|
| | | | GNHIKSYVLGVKGADIRDSGDLVHHVQNVLEFVMSEIRTVYV TDCRVSTSAFSKAGMCLRCSACALNSVVQSVLSKRTLQARSMHE VIELLNVCEDLAGSTGLAKETFGSLEETSPPPCWNSVTDSELLV HERYEQICEFYSSRAKKMNLIQSLNKHLLSNLAAIILTPVKQAVIE LSNESQPTLQLVLPITYVRLKLTAKANDAGTVSKLCHLFLEAL KENFKVHPAHKVMILDPQKLRPVPPYQHEEIIIGKVCELNEV KESWAEEADFEPAKKPRSAAVENPAQEDDLGKNEVYDYLQE PLFQATPDLFQYWSCVTVQKHTKLAKLAFWLLAVPAVGARSGCVN MCEQALLIKRRRLSPEDMNKLMFLKSNML |
| 6181 | 169 | 1032 | TRTLLSPVLLPGPRWKPWRRRPMPGLALPAWLQPRYRKNAFLFI YYLIQFCGHSWIFTNMTVRFSSFGKDSMVDTPYAIGLVMRLCQS VSLLELLHIYVGIESNHLLPRFLQLTERIIILFVVTISQEEVQE KYVVCVLFVFWNLLDMVRYTYSMLSVIGISYAVLTWLSQTLWMP IYPLCVLAEAFATYQSLPYFESFGTYSTKLFPDLSIYFPVVLKI YLMMLFIGMYFTYSHLYSERRDILGIFPIKKKKM*STAFQCDTR KDRLNWQCSK*NTGSILVEKFLVF |
| 6182 | 1769 | 1224 | AS*IDYQILNTLLKEFQLTEENTKLRYLTCSLIEDMAAAYFPDCI VRPFGSSVNTFGKLGCDLDMFLDDETRNLNLSAHKISCNFMLEFQ VKNVPSEIATQKILSVLGECLDHFPGCGVGVQKILNARCPVLR FSHQASGFQCDLTNNRIALTSSSELLYIYGALDSRVRAVFSVR CWARAHSLSIPGAWITNFSLTMMVIFFLQRRSPPIPLTLDL KTLADAEDKCVIEGNNCTFVRDLRSRIKPSQNTETLELLKKEFFE YFGNFAFDKNSINIRQGREQNKPDSSPLYIQNPFFETSLNISKNV SQSOLQKFVDLARESAWILQEDTDRPSSISNRPNGLVSLLLPS APNRKSPFKKSKNKAETVKNLLES LGNRTENFTKTSKRTI STQT |
| 6183 | 1118 | 452 | HLDRYIKSPGSGSSTPAPPSHLLLYLHPQSTRTMGCCGCSRG GSGCGGCGSSCGGCGSGCGGCGSGRGCGSGCGGCGSSCGGCGS RCYVPVCCCKPVCSWVPACSTSCGSCGSGKGGCGSGGSGKGGC GSCGCSQSSCKPCCSSGCGSSCCQSSCKPCCQSSCCVPVC CQSSCCCKPCCQSNCCVPVCCQCKI*GSGPRPSGFSCLVKAFLM VP |
| 6184 | 1 | 2191 | IVTVREEDGAPAVAPPGVVVS RANKRSGAGPGGGGGGARGAEE EPPPPQLQAVLVADSFDRFFPISKDQPRVLLPLANVALIDYTLT FLTATGVQETFFVCCWKAQIKHLLKSKNCRPTSLNVVRIITS ELYRSLGDVLRDVAKALVRSDFLLVYGDVISNINITRALEEHR LRRKL*KNVSVMTMIFKESSPSHPTRCHEDNVVAVDSTTNRVL HFQKTQGLRRFAFPLSLFQGSDDGVEVRYDLLDCHISICSPQVA QLFTDNFDYQTRDDFVRGLLVNEEILGNQIHMHVTAKEYGARVS NLHMYSACADVIRRWVYPLTPEANFTDSTTQSCTHSRHNIYRG PEVSLGHGSILEENVLGGSTVIGSNCFITNSVIGPGCHIEPGD NVVLDQTYLWQGVRAAGAQIHQSLLCDNAEVKERVTLKPRSVL TSQVVVGNITLPEGSVISLHPPDAEEDDDGEFSDDSGADQEK DKVKMKGYNPAEVGAAGKGYLWKAAGMNMEEEEELQQNLWGLKI NMEESESESEQSMDSSEPDSSRGSGSPQMDDIKVFQNEVLGTLQR GKEENISCDNLVLEINSLKYAYNISLKEVMQVLSHVLEFFPLQ MDSPLDSSRYCALLLPLLKAWSPVFRNYIKRAADHLEALAAIED FFLEHEALGISMAKVLMAFYQLEILAEETILSWFSQRDITDKGQ QLRKNNQQLQRFIQWLKEABEESSEDD |
| 6185 | 791 | 44 | PCTSCVLWATLHLPASTRKAPQAECCMISITEWQKIGVGITGFG IFFILGTLTYFDSVLLAFGNLLFLTGLSLIIGLRKTFWFFQFQ HKLKGTSLFLGGVIVLLRWPLLMFLETYGFPSLPKGFPPVAF GFLGNVCNIPFLGALFRRLQGTSSMV*KTEMSSINLDHWLKGAK REEWEPFPQSPALTHSPYTPGPPQVQKERNGAELTNSNPQVDSR GCQEAEMQTPRRLGWGWHYHTLTLYLWEEK |
| 6186 | 569 | 238 | VYGDSSNTNTHGAEERNRKLKHKHKLCHAQSRDLVNGLAKMA |

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|------------|--|--|--|
| | | | KERKVKNKVKNKADTEEVFNNSPTNQEKMPTSAILPDFSGSVIS NIRNQMETLHSQPHQEENLCFENSFSLINLLPINAVEPTSSQQI PNRETSEANKERRKMTSKSSESNIYSPITSFITADSELHDIKD LEDCLMVGLHTCGDLAPNLTIRIFTSNSEIKGVCSVGCCYHLLSE EFENQHKERTQEKWGFPMCHYLKEERWCCGRNARMSACLALERV AAGQGLPTESLFYRAVLQDIKDCCYGITKCDRHVGKIYKSCSSP LDYVRRSLKKLGLDESKLPEKIIMNYEYKPRMNELEAFNMLK VVLAPCIETLILLDRLCYLKEQEDIAWSALVKLFDPVKSPRCYA VTALKKQQ*FPLKQIIRCISL*DSAGCAEEVSVGDGPPALRDAP PSGSRVGSRYD |
| 6187 | 1701 | 771 | DANGPETRLARILNPDSETEPRPGRLEPELEATRPHEPKASCPA AAPLMERKPHVLVGVTSVAALKPLLVSKLLDIPGLEVAVVTT ERAKHFYSPQDIPVTLYSDADEWEMWKSRSDFVLHIDLRWADL LLVAPLDANTLGKVASGICDNLTCVMRAWDRSKPLLFPCAMNT AMWEHPITAQQVDQLKAFGYVEIPCVAKKLVCGDEGLGAMAEVG TIVDKVKEVLFQHSFGFQSS*PGISVMGVPLYSEWVQAKSVKMDV GKIGGYPHLLNGGPALSLEPRGQACSRNLNWTGPGLSFFQPGEEAA A |
| 6188 | 238 | 1534 | RGFVNAGPLMAELQVSPQWKAPEMSQICLSCGHPSA*GPRWASW NIGVFCIRCAGIHRNLGVHISRVKSVNLDQWTQEQIQCMQEMG NGKANRLYEAYLPETFRFPQIDPAVEGFIRDXYEKKKYMDRSLD INAFRKEKDDKWKRGSEPVPEKKLEPVVFEKVMPQKKEDPQLP RKSSPKSTAPVMDLLGLDAPVACS IANSKTSNTLEKDLDDLASV PSPSSSGSRKVVGSMPTAGSAGSVPENLNLFPPEPGSKSEEIGKK QLSKDSILSLYGSQTPQMPTQAMFMAPAQMAYPTAYPSFPQVTP PNSIMGSMPPPPVGMVAQPGAGSMVAPMAMPAGYMGGMQASMMG VPNGMMTTQAGYMGAMAMPQTUVYGVQPAQQLQWNLTQMTQQM AGMNFYGGANGMMNYGQSMGSGNEQAANQTLSPQMWK |
| 6189 | 1297 | 793 | LGEPLGDLCELI PGDVQQLQMGVEVHPGTGAQGSAAQSVAGEVQL TQLSHARQRPSCQGSQQLIALDLQHMDISRQPRWQHVQFVARQVQ RAQQAQLAEGVAVHLWAGDAVVAEVELLQEVGGGKVFAANACDL VVQDHEGAHAARQATGHALQRVIVQVRRVQPLEAL*RVPSGLPR RVRAFMI LHNQITGIGREDFATTYFLEELNLSYNRTSPQVHRD AFRKLRLRLSLDLSGNRLHMLPPGLPRNVHVLKVRNLEALALAR GALAGMAQLRELYLT SNRLRSRALGPRAWVDLAHLQLDLTAGNQ LTEIPEGLPESLEYLYLQNNKISAVPANAFDSTPNLKGIFLRFN KLA VGSVVDSAFRLKHLQVLDIBGNLEFGDISKDRGLGKEKE EEEEDEV EEEETR |
| 6190 | 66 | 1309 | ILVGNVSFLLSFAEYVCNCSVVGSLNVNRCNQTGQCECRPGYQ GLHCETCKEGFY_LNYTSGLCQPCDCSPHGALSIPCNSSGKCQCK VGVIGSICDRQDGYGFSKNGCLPCQCNRSASCDALTGACLN CQENSKGNHCEECKEGFYQSPDATKECLRCPCSAVTSTGSCSIK SSELEPECDQCKDGYIGPNCNKCEGYNFDISICRKCQCHGVY PVKTPKICKPESGECINLHNTTGFWCENCL*GYVHDLBGNCKI KVILPTPEGSTILVSNASLTTSVPTPVINSTFTPTTLQTI FSVS TSENSTALADVSWTQFNI IILTVIIIVVLLMGFVGVAVYMYRE YQNRKLNAPFWTIELKEDNISFSSYHDSIPNADVSGLLEDDGNE VAPNGQLTLTPIHNYKA |
| 6191 | 1212 | 1511 | VNLCHGGLLHLSLTHLGIKPSMH*LFFMLLSFPHLTPQQPKCPS MIDWIKKIWIYITMEYYATIKRNEIMFFAGTWMEEMAIILSKLM QDYMPSLISGS |
| 6192 | 3 | 950 | TRGCGNKMAGKKNVLSLAVYAEDSEFESDGEAGIEAVGSAEE KGGLVSDAYGEDDFSRIGDGEDGYEEBEDENSRSQSEDDSETK PEADDPKDNTEAEKRDQQLVASFSERVRNMSPEDEIKIPPEPPG RCSNHLQDKIQKLYERKIEGMDMNYI IQRKKEFRNPSIYEKLI QFCAIDELGTNYPKDMFDPHGWSSEDSYBALAKAQKIEMDKLEK |

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|------------|--|--|---|
| | | | AKKERTKIEFVTGTTKGGTTTATSTTTTASTAVADAQKRKSKW DSAIPVTITIAOPTILTTTATLPAVVTVTTSASGSKTTVISAVGT IVKKAQ |
| 6193 | 3 | 950 | TRGCGNKMAGKKNVLSLAVYAEDSEPESDGEAGIEAVGSAEE KGGLVSDAYGEDDFSRLLGDEDEGYEEDENSROSEDDDDSETEK PEADDPKDNTEAEKRDPELVASFSEVRNMSPEIKIPPEPPG RCSNHLQDKIQKLYERKIEGMDMNYIIQRKKEFRNPSIYEKLI QFCAIDELGTNYPKDMFDPHGWSSEDSYEEALAKAQKIEMDKLEK AKKERTKIEFVTGTTKGGTTTATSTTTTASTAVADAQKRKSKW DSAIPVTITIAOPTILTTTATLPAVVTVTTSASGSKTTVISAVGT IVKKAQ |
| 6194 | 3 | 950 | TRGCGNKMAGKKNVLSLAVYAEDSEPESDGEAGIEAVGSAEE KGGLVSDAYGEDDFSRLLGDEDEGYEEDENSROSEDDDDSETEK PEADDPKDNTEAEKRDPELVASFSEVRNMSPEIKIPPEPPG RCSNHLQDKIQKLYERKIEGMDMNYIIQRKKEFRNPSIYEKLI QFCAIDELGTNYPKDMFDPHGWSSEDSYEEALAKAQKIEMDKLEK AKKERTKIEFVTGTTKGGTTTATSTTTTASTAVADAQKRKSKW DSAIPVTITIAOPTILTTTATLPAVVTVTTSASGSKTTVISAVGT IVKKAQ |
| 6195 | 736 | 235 | VANGLQSNMFKFYCDYCDTYLTHDSPSVRKHCSGRKHKENVKD YYQKWMEEQAQSLIDKTTAAFOQGGKIPPTFFSAPPPAGAMIPPP PSLPGPPRFGMMPAPHMGGPPMMPMMGPPPPGMMFVGPAPGMRP PMGHPMPMPGPPMMPARPMMPVTRPGMTRPDR |
| 6196 | 1512 | 623 | KTGRRSAAYVRNILDNAEQVISNLEARNLGPRLTPLLQEDSH QRLLMGLMVSELKDHFLRHLCQGEKKKIEQMVLDYISKLLDLIC HIVETNWRKKNLHSHVLFNSRGSAAEFAVFHIMTRILEATNSL FLPLPPGFHTLHTILGVQCLPLHLLHCLDSGVLTLTETAVIRL MKDLDNTEKNEKLKFSIIVRLPLIGQKICRLWDHPMSSNIISR NHVTRLLQNYKKQPRNSMINKSSFSVEFLPLNYFIEILTDIESS NQALYPFEGHDNVDAEFVEEAALKHTAMLLGL |
| 6197 | 3 | 819 | ADPEGTEEAVMSRYTRPPNTSLFIRNVADATRPEDLRREFGRY PIVDVYIPLDFYTRRRPRGFAYVQFEDVRDAEDALYNLRKWKVC QLEIQFAQGDRTKTPGQMSKERHPCS PSDHRRSRSPSQRRTRS RSSSWGRNRRRSDSLKESRRRFSYSQSKSRKSLPRRSTGARQ SRTFRRNFGRGRSRKSLQKRKSKS IGKSQSSSPQQTSSGKTS RSHGRHSDSIARSPCKSPKGYTNFETKVQTAKHSHFRSHRSRS YRHKNSW |
| 6198 | 111 | 1912 | SEALSPSFFISPAFLRLKLPALDGTLPHPDTLGMNYEGARSE RENHAADDSEGCALDMCCSERLPGLPQPIVMEALDEAGLQDSQ REMPPPPPPSPSDPAQKPPRAGASHSLTVRSSLCFLFAASQFL LACGLVWFSGYGHVWSQATNLVSSLLTLKQLEPTAWLDSGTW GVPSLLLVFLSGGLVLVITLVWHLRLTPPEPTPLPEPDRRQSV SRQPSFTYSEWMEEKIEDDFLDLPVETPVFDCVMDIKPEADP TSLTVKSMGLQERRGSNVSLTLDCTPGCNEEGGYLMSPREES AREYLLSASRVLAELHEKALDPFLQAEFFEIPMNFVDPKEY DIPGLVRKNRYKTIPLNPHSRVCLTSPDDPDLSSYINANYIRG YGGEERKVIATQGPVISTVADFWRMVWQEHPTPIVMITNIEEMN EKCTEYWPPEQVAYDGVETVQKVIHTEYRLRLISLKSGETER GLKHYWFTSWPDQKTPDRAPLLHLVREVEEAAQGEQPHCAPTI VHCASAGIGRTGCFIATSI CCQQLRQEGVVDILKTTCCQLRQDRGG MIQHCEQYQFVHHVMSLYEKQLSHQSFE |
| 6199 | 144 | 1211 | MARENGESSSSWKKQAEIDIKTIEFKETLGTGAFSEVVLAEBKA TGKLFVAKCI?KKALKGKESSIEIEIAVLRKIKHENI VALEDIY BSPNHLVLMQLVSGGELFDRIVEKGFYTEKDASTLIRQVLDV YYLHRMGI VHRDLKPENLLYSQDEESKIMISDFGLSKMEGKD VMSTACGTPGYVAPEVLAQKPYSKAVDCWSIGVIAVILLCGYFP |

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|------------|--|--|---|
| | | | FYDENDSKLFEQILKAEYEFDSFYWDDISDSAKDFIRNLMKEDP NKRYTCEQAARHPWIAGDTALNKNIHESVSAQIRKNFAKSKWRQ AFNATAVVRHMRKLLGLGSSLDSSNASVSSSLASQKDCASGTF HAL* |
| 6200 | 702 | 96 | LPEVPHSLRPRVKPHLCCAQPAVRVMARLPKLA VF DLDYTLWPF WVDTHVDPFPHKSSDGTVRDRRGQDVRLYPEVPEVLKRLQSLGV PGAAASRTSEIEGANQLLELFDLFRYFVHREIYPGSKITHFERL QOKTGIPFSQMIFFDDERNIVDVSKLGVTCIHQNGMNLQTL QGLETFKAQQTGPLRSSLEESPFEEA |
| 6201 | 2809 | 2383 | GQTPRVRWKMRSLRAGKRRQTAGRKSKSPPKVPVIVQDDSLPA GPPQIRILKRPTSNGVVSSPNSTSRPTLPVKSLAQREAEYASA RKRILGSASPREEQEKPIILDRPTRISQPEDSRQPNVIRQPLGP DGSQGFQRR |
| 6202 | 2 | 426 | INADRAAVASSLLSRPTRKMAPQKDRPKRSTWRFNLDLTHPVE DGI FDSGNFEQFLREKVKVNGKTGNLGNVHI FRFNKITVVS KQFSKRYLKYLTKKYLKKNLRLDWLRVVASDKETELRYFQISQ DEDESESED |
| 6203 | 419 | 2550 | RCPRPPATAGAAASRPDRSPPSGISGSEAAAGAGAAAPASQHEA TGTGAVQTEAMKQILGVIDKKLRNLEKKKGKLDYQERMNKG LNQDQLDAVSKYQEVNTNNLEPAKELQRFMALESQDIQTKTKTA RREQLMREAEQKRLKTVLELQYVLDKLGDDDEVRTDLKQGLNGV FILSEELSLDDEFYKLVDPDRDMSLRNLNQYEHASIHLDLLE GKEKPVCGTTYKVLKEIVERVFQSNFYDSTHNNHQNGLCEESEAA SAPAVEDQVPEAEPEAEYEQSEVESTEYVNRQFMAETQFTS GEKEQVDEWTVETVEVNSLQQQQAASPSVPEPHSLTPVAQAD PLVRRQVRQDLMAQMQGPYNFIQDSMLDFENQTLDPALVSAQPM NFTQNMMPQLVCPVHSESRLAQPQVQVQPEATQVPLVSSTS EGYTASQPLYQPSHATEQRPQKEPIDQIQATISLNTDQTTASS LPAASQPVQFQAGTSKPLHSSGINVNAAPFQSMQTVFNMNAPVP PVNEPETLQKQYQASYNQSFSSQPHQVEQTELQEQELQTVVG TYHSGPDQSHQVTGNHQPPQNTGFPNRNQPYNSRGVSRGGS RGARGLMNGYRGFPANGFRGGYDGYRPSFSNTPNSGYTQSQFAP RDYSGYQRDGYQQNFKRGSGQSGPRGAPRGRGGPPRPNRGMQM NTQQVN |
| 6204 | 2933 | 787 | CTHNLSLLGGRALIHFNRLNLKIQEGBAHNIFCPAYDCFLV PGDIIKS VVSKEMDKRYLQFDIKAFVENNPAIKWCPTPGCDRAV RLTKQGSNTSGSDTLSPFLRLRAVDCGKGLFCWECLGEAHEP CDCQTWKNWLQKITEMKPEELVGUSEAYEDAANCLWLLTNSKPC ANCKSPIQKNEGCNMQCAKCKYDFCWI CLEWKKHSFVHWEVI YRCTRYEVIQHVEEQSKEMTVEAEKKHKRFQELDRFMHYITRPF NHEHSYQLEQRLKTAKEKMEQLSRALKETEGGCCPDFTTIEDAV HVLLKTRRILKCSYPYGFLEPKSTKKEIFELMQTDLEMVTEDL AQKVNRPYLRTPRHKIKAACLQVQKQREFLASVARGVAPADSP EAPRRSFAGGTWDWEYLGFAPEEYAEFOYRRRHQRRRGVDVHS LLSNPPDPDEPSESTLDIPEGGSSRRPGTSVVSSASMSVLHSS SLRDYTPASRSENQDSLQALSSLOEDDPNILLAIQLSLQESGLA LDEETRDFLSNEASLGAICTSLPSRLDSVPRNTDSPRAALSSE LLELGDSLMLGAENDPFSTDTLSSHPLSEARSDFCPSSSDPDS AGQDPNINDNLLGNIMAWFHDMPQSIALIPATTEISADSQLP CIKDGSEGVKDELVLVLPEDSMFEDASVSEGRGTQIEENPLEENT PGGGKQHPQAW |
| 6205 | 1 | 1200 | RAHRGKMALEVGMEDGQLSDSDSDMTVAPS DRPLQLPKVLGGD SAMRAFQNTATACAPVSHYRAVESVDSSEESFSDSDSDCLWKR KRQKCFNFPKBPFPFGQSSQKPPVAGGKINNIIWGA VLQEQN QDAVATELGILMEGTIDRSRQSETYNYLLAKKLKESQEHETKD LDKELDEYMHGGKKMGSKBEENGQGHLLKRRKRPVKDR LGNRPEMN |

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|------------|--|--|---|
| | | | YKGRYEITAEDSQEKVADEISFRLQEPKDLIARVVRTIGNKA I3LLMETAEVEQNGGLFIMNGSRRTTPGGVFLNLLKNTPSISE QIKDIFYIENQKEYENKKAARKRRTQVLGKMKQAIKSLNFQED DDTSRETFASDTNEALASLDESQEGHAEAKLEAEAEIEVDHSHD LDIF |
| 6206 | 10 | 1442 | ITISERRERSCLHLVLCIRCSDDVVMGSSVLGLCSMASWIFCLCGS APCLLCRCPCSGNNSTVTRLIYALFLVGVACVMLIPGMEEQ LNKIPGFCENEGVVPNCNVLGVYKAVYRLCFGLAMFYLLSLIM IKVSSSDPRAAVHNGFWFFKFAAAIAIIIGAFFIPEGFTFTTW FYVGMAGAFCFILIQVLVLLIDFAHSWNESWVEKMEEGNSRCWYA ALLSATALNYLLSLVAIVLFFVYIYTHPASCENKAFISVNMLLC VGASVMSILPKIQESQPRSGILLQSSVITVYTMVLTWSAMTNEPE TNCNPSLLSIIGYNTTSTVPKEGQSVQWHAQGIIGLILFLLCV FYSSIRTSNNQVKNLTLTSTDESTLIEDGGARSDDGSDGDDVH RAVDNERDGVTSYSFFHFLFLASLYIMMTLTNWRYEPEPSREM KSQWTAIVVVKISSWIGIVLVVTLVAPLVLTNRDFF |
| 6207 | 2924 | 1471 | TVMAEAAATPGTTATTSGAGAAAATAAAASPTPIPTVTPAPSLGAG GGGGGSDGGGGGWTKQVTCRYFMHGVCKEGBDNCRYSHDLSDSFY SVVCKYFQRCYCIYGDRCRYEHSKPLKQEEATATELTTKSSLAA SSSLSSIVGVLVEMNTGEAESRNSNFATVAGSSEDWVNAIEFVP GQPYCGRTAPSCTEAPLQGSVTKEESEKEQTAVETKKQLCPYAA VGECRYGENCVYLHGDSDDMCGLQVLHPMDAAQORSQHIKSCIEA HEKDMELSAVQSRKDMVCGICMEVVYKANKPSERRFGILSNCN HTYCLKCIKWRSAKQFESKIKSCPECRITSNFVIPSEYVWBE KEEKQKLILKYKEAMSNKACRYFDEGRGSCFFGGNCFYKHAYPD GRREBPQRQKVGTSRRYRAQRNRHFWELIEERENSNNPFDNDEEE VVTFFELGEMLLMLLAAGGDDDELTDSEDEWDLFHEDELEDFYDLDL |
| 6208 | 2924 | 1471 | TVMAEAAATPGTTATTSGAGAAAATAAAASPTPIPTVTPAPSLGAG GGGGGSDGGGGGWTKQVTCRYFMHGVCKEGBDNCRYSHDLSDSFY SVVCKYFQRCYCIYGDRCRYEHSKPLKQEEATATELTTKSSLAA SSSLSSIVGVLVEMNTGEAESRNSNFATVAGSSEDWVNAIEFVP GQPYCGRTAPSCTEAPLQGSVTKEESEKEQTAVETKKQLCPYAA VGECRYGENCVYLHGDSDDMCGLQVLHPMDAAQORSQHIKSCIEA HEKDMELSAVQSRKDMVCGICMEVVYKANKPSERRFGILSNCN HTYCLKCIKWRSAKQFESKIKSCPECRITSNFVIPSEYVWBE KEEKQKLILKYKEAMSNKACRYFDEGRGSCFFGGNCFYKHAYPD GRREBPQRQKVGTSRRYRAQRNRHFWELIEERENSNNPFDNDEEE VVTFFELGEMLLMLLAAGGDDDELTDSEDEWDLFHEDELEDFYDLDL |
| 6209 | 1758 | 829 | ERLCFPCMQSKIYSYSPNKC SGMRFP LQERN SVTHHEVKQGGK PLAGIYRKREBKRNAGNAVRSA MKSEBQKIKDARKGPLVFFPNQ KSEAEPKTPPSSCDSTNAATAKQALKKPIKQKQAPRKAQGGK TQQRKLTDFYPVRRSRKSKAELQSEERKRIDELIESGKEEGM KIDLIDGKGRGVIATKQFSRGDFVVEYHGDLEITDAKREALY AQDPSTGCYMYFYOYLSKTYCVDATRETNRLGRLINHSKCGNCQ TKLHDIDGVPHLILIASRDIAAGEELLYDYGDRSKASIEAHPWL KH |
| 6210 | 3761 | 387 | IFGMSKLRMVLLLEDSGSADFRHFVNLSPTITVVLILLSACFVT SSLGGTDKELRLVDGENKCSGRVEVKVQEEWGTVCNNGWSMRAV SVICNQLGCPATAIKAPGWANSSAGSGRIWMDHVSRCGNESALWD CKHDGKGKHSNCTHQDAGVTCSDGSNLEMLTRGGNMCSGRIE IKFQGRWGTVCDDNFNIDHASVICROLECGSAVSFSGSSNFEGEG SGPIWFDLINCNGNESALWNCKHQGWGKHNCDAEDAGVICSKG ADLSLRLVDGVTECSGRLEVRFGQEWGTICDDGWDSDYDAVACK QLGCPATAVTAIGRVNASKGFGHIWLDVSVCQGHFAVWQCKHHE WGHYCNHNEDAGVTCSDGSDLELRLRGGGSRCACTVEVEIQRL LGKVCDRGWGLKEADVVCRLGCGSALKTSYQVYSKIQTNTWL |

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|------------|--|--|--|
| | | | <p>FLSSCNGNETSLWDCKNWQWGGGLTCDHYEAKITCSAHREPRIV GGDIPCSGRVEVKHGDWGSICDSDFSLEAASVLCRELQCGTVV SILGGAHFEGNGQIWAEEFQCEGHESHLSCPVAPRPEGTCSH SRDVGVVCSRYTEIRLVNGKTPCEGRVELKTLGAWGSLCNSHWD IEDAHVLCQQLKCGVALSTPGGARFGKNGQIWRHMFHCTGTEQ HMGDCPVTALGASLCPSEQVASVICSGNQSQTLSSCNSSSLGPT RPTIPEESAVACIESGQLRLVNGGRCAGRVEIYHEGSGWTICD DSWDLSDAHVVCRLGCGEAINATGSAHFEGGTGPIWLDKMCN GKESRIWQCHSHGWGQONCRHKEDAGVICSEFMSLRLTSEASRE ACAGRLEVFYNGAWGTVGKSSMSETTVGVVCRQLGCADKGINP ASLDKAMSIPMWVDNVQCPKGPDTLWQCPSSPWEKRLASPSEET WITCDNKIRLQEGPTSCSGRVEIWHGGSWGTVCDDSWDLDDAQV VCQQLGCGPALKAFKEAEFGQGTGPIWLNVEVKCKGNESSLWDCP ARRWGHSECGHKEDAAVNCTDISVQKTPQKATTGRSSRSQSFIA VGILGVLLAIFVALFFLTKKRRQRQLAVSSRGENLVHQIQYR EMNSCLNADDLDLMNSSGGHSEPH</p> |
| 6211 | 3761 | 387 | <p>IFGMSKLRMVLLLEDSSGSAFRRHFVNLSPFTITVULLLSACFVT SSLGGTDKELRLVDGENKCSGRVEVKVQEEWGTVCNNGWSMEAV SVICNQLGCPATAKAPGWANSSAGSGRIWMDIIVSCRGNESALWD CKHDGWSKHSNCTHQDAGVTCSDGSNLEMLTRGGNMCSGRIE IKFQGRWGTVCDDNFNIDHASVICRQLECGSAVSFSGSSNFGEG SOPWFDDLI CNGNESALWNCKHQGWGKHNCDAEDAGVICSGK ADLSRLVDGVTECSGRLEVRFGGEWGTICDDGWDSYDAAVACK QLGCPATAVTAIGRVNASKGFHGIWLDVSVSCQGHFAVWQCKHHE WGKHYCNHNEAGVTCSDGSLELRLRGGGSRCACTVEVEIQRL LGKVCDRGWGLKEADVVCRLGCGSALKTSYQVYSKIQATNTWL FLSSCNGNETSLWDCKNWQWGGGLTCDHYEAKITCSAHREPRIV GGDIPCSGRVEVKHGDWGSICDSDFSLEAASVLCRELQCGTVV SILGGAHFEGNGQIWAEEFQCEGHESHLSCPVAPRPEGTCSH SRDVGVVCSRYTEIRLVNGKTPCEGRVELKTLGAWGSLCNSHWD IEDAHVLCQQLKCGVALSTPGGARFGKNGQIWRHMFHCTGTEQ HMGDCPVTALGASLCPSEQVASVICSGNQSQTLSSCNSSSLGPT RPTIPEESAVACIESGQLRLVNGGRCAGRVEIYHEGSGWTICD DSWDLSDAHVVCRLGCGEAINATGSAHFEGGTGPIWLDKMCN GKESRIWQCHSHGWGQONCRHKEDAGVICSEFMSLRLTSEASRE ACAGRLEVFYNGAWGTVGKSSMSETTVGVVCRQLGCADKGINP ASLDKAMSIPMWVDNVQCPKGPDTLWQCPSSPWEKRLASPSEET WITCDNKIRLQEGPTSCSGRVEIWHGGSWGTVCDDSWDLDDAQV VCQQLGCGPALKAFKEAEFGQGTGPIWLNVEVKCKGNESSLWDCP ARRWGHSECGHKEDAAVNCTDISVQKTPQKATTGRSSRSQSFIA VGILGVLLAIFVALFFLTKKRRQRQLAVSSRGENLVHQIQYR EMNSCLNADDLDLMNSSGGHSEPH</p> |
| 6212 | 1 | 1134 | <p>LKWE LRPGGAVWGTGRGAGTGAPRSCCCQTNPGPPSSLRRAFR RELPPFACHEIGLGAEGSGPPAPAAERSRAMEEEASSPGL GCSKPHLEKLTIGITRILESSPGVTEVTIIEKPPAERHMISSE QKNNCVMPEDEVKNFYLMINGFHTWSVKLDEHIIPLGSMAINS SKLTQLTQSSMYSLPNAPTADLEDDTHEASDDQPEKPHFDSRS VIFELDSNGSGKVLVYKSGKPALEDTEIWFDRALYWHFLT DTFTAYYRLIITHLGLPQWQYAFTSYGISPQAKQRVSMYKPI NTNLLTEETDSFVNKLDPKVKFSKNKIVIPKKKGPVQAGGQK GPSGSGPSTSSTSKSSSGSGNPTRK</p> |
| 6213 | 1 | 1134 | <p>LKWE LRPGGAVWGTGRGAGTGAPRSCCCQTNPGPPSSLRRAFR RELPPFACHEIGLGAEGSGPPAPAAERSRAMEEEASSPGL GCSKPHLEKLTIGITRILESSPGVTEVTIIEKPPAERHMISSE QKNNCVMPEDEVKNFYLMINGFHTWSVKLDEHIIPLGSMAINS SKLTQLTQSSMYSLPNAPTADLEDDTHEASDDQPEKPHFDSRS</p> |

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|------------|--|--|---|
| | | | VIFELDSCNGSGKVCVLVYKSGKDALASDTBIWFLDRALYWHFLT DTFTAYYRLILTHLGLPQWQYAFSTSYGISPOAKQRVSMYKPIY NTNLLTEETDSFVNKLDPSKVFKSKNKIVIPKKKGPVQAGGQK GPSGPGSPSTSSSTKSSSGSGNPTRK |
| 6214 | 2 | 460 | HELAPSAIRRAARLGLGPARWQSRAAFYFVRGFRGTGWSFVGWV VLGTSARTRLFFFLSKMAASSRAQVLALYRAMLRERKRSAYN YRTYAVRRIRDAFRENKVKDPVEIQTLVNKAKRDLGVIRRQVH IGQLYSTDKLIIENRDMPT |
| 6215 | 2 | 1849 | FVAGGPRGSGSAETMPEIRVTPGLAGQDVGRSCILVSIAGKNV MLDCGMHMGFNDDRFPDFSYITQNGRIITDFLDCVIIISHFLDH CGALPYFSEMVGVDGPIYMTHTPTQAI CPILEDRKIAVDKKG ANFFTQMIKDCMKVAVHLHQTQVQVDELEIKAYYAGHVLGA AMFQIKVGSSEVYTGDNMTDPDRHLGAAWIDKCRPNLLITEST YATTIRDSKRCRERDFLKVVHETVERGGKVLIPVFALGRAQELC ILLETFWERNMLKVPYIFSTGLTEKANHYKLFIPWTNQKIRKT FVQRNMFPEFKHIKAFDRAFDNPGPMVVFATPGMLHAGQSLQTF RKWAGNEKNMVIMPGYCVQGTVGHKILSGQRKLEMEGRQVLEVK MQVEYMSFAHADAKGIMQLVGQAEPESEVLLVHGEAKKMEFLKQ KIEQLRVNICYM?ANGETVTLPTSPSIPVGISLGLLKREMAQCL LPEAKKPRLLHGTILMKDSNFRVLSSEQALKELGLAEHQLRFTC RVHLHDTRKEQETALRVYSHLKSVLKDHCVQHLPDGGSVTVESVL LQALAPSEDPGTKVLLVSWTYODEELGSFLTSLKKGFLPQAPS |
| 6216 | 11 | 393 | QTRPEPRNSALRQSRKMAVVGVSVSRLGRSRPQLGRPMSS GANGEGSARMWKTITFFVALPGVAVSMLNVYLKSHGHEHERPE FIAYPHLRIRTKPFPWGDGNHTLFHNPVHNPLPTGYEDE |
| 6217 | 9 | 1178 | TRVGRGESGLKMEVKPPPPGRFPQDPSGRRRRRRGEGHDPKEFEQ LRKLFIGGLSFETDDSLREHFKEKWTLTDCVVMRDPQTKRSRG FGFVTYSCVEEVDAAACARPHKVDGRVVEPKRAVSREDSVKPGA HLTVKKIFVGGIKEDTEENLRDYFEKYGKIETIEVMEDRQSGK KRGFAPVTFDDHDTVDKIIVQKYHTINGHNCVKKALKSQEMQS AGSQRGSGGSGNFMGRGNGFGGGGNGFGRGNGFGRGGYGGGG GSGRGSYGGGDDGYNFGGDDGNGYGGGPGYSSRGYGGGGPGYG NQGGGYGGGGYDYNFEGGNGFGGNGYGGGNGYNDFGNYSQQQS NYGPMKGGSGFGRSSGSPYGGGYGGGGGGGGYGSRRF |
| 6218 | 1305 | 906 | SCERRGFIADDLKRFLYKLPVSEGLHAIIVSDRDGVFVIVKA NDNAPEHALRPGFLSTFALATDQSGKLGLSKNKSIIICYNTYQV VQFNRLPLVVSFIASSANTGLIVSLEKELAPLFEELRQVVEVS |
| 6219 | 2 | 890 | AGFPEGAGAGTRCAGAEEMASAGGEDCESPAPEADRPQRPFPL IGVSGGTASGKSTVCEKIMELLGQNEVEQQRKVVLSQDRFYK VLTARQKAKALKGQYNFDHPDAFDNDLMHRTLKNIVEGKTVEVP TYDFVTHSRLEPETTUVVYPADVVLFEGLLVFYSQBIRDMFHLRLF VDTSDVRLSRRVLRDVRGRDLEQILTQYTTFFVKPAFEEFCLP TKKYADVIIIPRGVDMVAINLIVQHIQDILNGDICKWHRGGSGN RSYKRTFSEPDHFGMLTSGKRSHLESSSRPH |
| 6220 | 227 | 764 | EQNISLEMSCTIEKALADAKALVERLRDHDAAESLIEQTALN KRVEAMKQYQEEIQELNEVARHRPRSTLVMGIQENRQIRELQQ ENKELRTSLBEHQSALELIMSRYEQMFRLLMASKKDDPGIIMK LKEQHSKIDMVHRNKSEGFFLDASRHILEAPQHGLERRHLEANQ NVH |
| 6221 | 98 | 916 | RWINDLNPVSDGLELRPKYNGILHCLTTIWKLDGLRGLYQGVTP NIWAGLSWGLYFVFNAIKSYKTEGRAERLEATEYLVSAEAG AMTLCITNPLWVTKTRLMLQYDAVNSPHRQYKGMFDTLVKIYK YEGVRGLYKGFVGLFGTSHGALQFAYELLKLKYNQHINRLPE AQLSTVEYISVAALSKIFAATAYPYQVVRARLQDQHMFSYSGVI DVITKTWRKEGCGGYKGIAPNLIRVTPACCITFVYENVSHFL LDLREKRK |

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|------------|--|--|--|
| 6222 | 2 | 2116 | MARELRALLLWGRRLRPLLRAPALAAVPGGKPIILCPRTTAQLG PRRNPASLSQAGRLFTQTAEDEKKEPLHSIISSSTESVQGSSTSKH EFOAETKILLDIVARSLEYSEKEVFIRELISNASDALEKLRHKL SDGQALPEMEIHLQTNAEKGTITITQDTGIGMTQEEELVSNLGTIA RSGSKAFDLALQNAEASSKIIGQFGVGFYSAFMVADRVEVYSR SAAPGSLGYQWLSDGSGVFEIAEASGVRTGTKIIHLKSDCKEF SSEARVRDVVTKYSNFSFPLYLNGRRMNTLQAIWMMDPKDVR WQHEEFYRYVAQAHDKPRYTLHYKTDAPLNIRSIYFVPMKPSM FDVSRLELSSVALYSRKVLITQKATDILPKWLRFIGVVDSEDI PLNLSRELLQESALIRKLRDVLQRLIKFFIDQSKKDAEKYAKF FEDYGLFMREGIVTATEQEVKEDIKLLRYESSALPSGQLTSL EYASMRPAGTRNIYYLCAPNRHLAEHSPPYEAMKKDTEVLFCF EQFDELTLHLREDFDKKLISVETDIVVDHYKEEFEDRSPAAE CLSEKETELMAWMNRNLGSRVTNVKVTLRDTHPAMVTVLEMG AARHFLRMQQLAKTQEEAQLLOPTLEINPRHALIKKLNQLRAS EPGLAQLLVQIYENAMIAAGLVDDPRAMVGRNLNELLVKALERH |
| 6223 | 3 | 715 | DAWARTMAGMVDFODEEQVKS FLENMEVECNHYHCKDPPDGY RLVDYLEGIRKNFDEAAKVLKFNCEENQHSDCYKLGAYYVTGK GGLTQDLKAAARCFLMACEKPGKKSIAACHNVGLLAHQGVNED GQPDLGKARDYYTRACDGGYTSSCFNL SAMFLQAGPGPKDMDL ACKYSMKACDLGHIWACANASRMVYKLGVDVKVEAKAEVLKNRA QQVHKEQQKGVQPLTFG |
| 6224 | 1 | 133 | LRTISSMAWGPLLTLTLLAHCTGSWAQSVLTQPPSVSGARIPHEK |
| 6225 | 3259 | 938 | LLSCRLAICLKFVSERKTVMGPGGARRQAFLAFGDVTVDF QKEWRLLSPAQRALYREVTLENYSHLVSLGILHSHKPELIRLEQ GEVPWGEERRRRRPGPCAGIYAEHVLPRKNLGLAHQRQQQLQFSD QSFQSDTAEGQEKESKTPMAFSSPPLRHAVSSRRNSVVEIES SQGQRENPTIDKVLKGIENSRRWAFKCAERQDQFSRKMVMV I I KKAHSRQKLFTCRECHQGFDESAALLHONHTTGEKSYVCSVCG RGFSLKANLLRHQRTHSGEKPFLCKVCGRGYTSKSYLTIVHERTH TGEKPYECQECGRFNDKSSYNKHLKAHSGEKPFCVCKECCGRGYT NKSIFYVVKRIHSGEKPYPCECGRGFSNKSHLITHQRTHSGEK PFACRQCKQSFSVKGSLLRHQRTHSGEKPFCVCKDCERSFSQKST LVYHQRTHSGEKPFCVCECGQGFQKSTLVKHQITHESEKPFVC KDCGRGFIQKSTFTLHQRTHSGEKPFGCRECGRFRDCKSSYNKH LRAHLGEKRFRCRDCGRGFTLKPNLTIHQRTHSGEKPFCMCKQCE KSFSLKANLLRHQWTHSGERPFNCCKDCGRGFIKSTLLFHQKTH SGEKPFCSECGQGF IWKSNLVKHQLAHSGKQPFVCKECCGRGFN WKGNNLTHQRTHSGEKPFCVNCVCGQGF SWKRSLTRHHWR IHSKE KPFVQCCECKRGYTSKSDLTVHERIHTGERPYECQECGRKFSNKS YYSKHLKRLHREKRFCTGSGVGEASS |
| 6226 | 29 | 266 | TKVSELGGSQLFFLPLWRRRLCRCGLGPRVSPMAGPRVEVDGS IMEGGQSLRVSTGLSWLLSLPWRAQIRAGR SYA |
| 6227 | 2581 | 890 | MSASSLLEQRPKGQGNKVQNGSVHQKDGLNDDDFEPYLSPOARP NNAYTAMSDSYLPSYYSFSGFSYSLGEAAWSTGGDTAMPYLT YCQLSNGEPEFLPDAMFGQPGALGSTPFLGQHGFNFPSGIDFS AWGNSSQGGSTQSSGYSNYAYAPSSLGAMIDGQSAFANETL NKAPGMNTIDQMAALKLGSTEVASNVPKVVGSAVSGSITSNI VASNSLPPATTIAPPKPAWADIASKPAKQPKLTKNGIAGSSL PPPIKHNDIGTWDNKGPAKAPQALVQNIQPTQSSPQPVG QANNSPVAQASVGGQTQPLPPPPPPQAQLSVQQQAQPTRWV APRNRGSGFGHNGVDGNGVQSQAGSGSTPSEPHVLEKLSIN NYPKDFDWNLLKHGRVFIKSYSEDDIHSRIKYNICWSTBHGK RLDAAYRSMNGKGPVYLLFSVNGSGHFCGVAEMKSAVDYNTCAG VWSQDKWGRFDVRWIFVKDVPNSQLRHIRLENNENKPVNTSRD TQEVPLEKAKQVLKI IASYKHTTSIFDDFSHYEKRO |

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|------------|--|--|--|
| 6228 | 47 | 1978 | GRCRRRGAVMELAQEARELGCAVEEMGVFVAARAPESTLRL CLGQGADIWAYILQHVHSORTVKKIRGNLLWYGHQDSPQVRRKL ELEAAVTRLRAEQELDQSLMERDTEAQDTAMEQARQHTQDT QRRALLRAQAGAMRRQOHTLRDPMQRLQNLRLQDMERKAKV DVTFGSLTSAALGLEPVVLRDVRTACTLRAQFLQNLPLPQAKRG SLPTPHDDHFGTSYQQWLSSVETLLTNHPPGHVLALEHLAAER EABIRSLCSGDLGDTESIRPQAPDQSDSSQTLPSMVHLIQEGW RTVGVLVSQRSTLLKERQVLTQRLQGLVEEVERVLSGSSERQVL ILGLRRCCLTWELKALHDQSQELQDAAGHRQLLLRELQAKQORI LHWROLVEETQEQVRLIKGNSASKTRLCRSPGEVLALVQRKVV PTFEAVAPQSRELLRCLLEEVRLPHILLGTLLRHRPGELKPLP TVLPSIHQLHPASPRGSSFIASHKLGLPKASELLPAAASL RQDLLLLQDQSLWCWDLHMKTSLLPGLPTQELLQIQASQEKQ QKENLGQALKRLEKLLKQALERIPELQGIQVGDWWEQPGQAALSE ELCQGLSLPQWRRLRWQAQALQKLCS |
| 6229 | 1571 | 560 | GPSLLGTRGTPNPARTLQIFFLLIGRRLTGRMAVDDLQFEEFG NAATSLTANPDATTNIEDPGETPKHQPGSPRGSGREDEDELLG NDDSDKTELLAGQKKSSPFWTFEYYQTFDVTYQVFDRIKGS LPIPGKNFVRLYIRSNPDLYGPFWICATLVPAIAISGNLSNFLI HLGEKTYHYVPEFRKVSIAATIIYAYAWLVPLALWGFLMWRNSK VMNIVSYSFLEIVCVYGYSLFIYIPTAILWIIIPKAVRWILVMI ALGISGSLAMTFWPAVREDNRVALATIVTIVLHMLLSVGC LAYFFDAPEMDHLPTTTATPNQTVAANKSS |
| 6230 | 1723 | 600 | SKMSGRSGKKKMSKLSRSARAGVI PPVGRMLRYLKKGTFFYRIS VGAPVYMAAVIEVLAELLELAGNAARDNKKARIAPRHILLAVA NDEELNQLLKGVTIASGGVLPRIHPELLAKRGRTKGKSETILSP PPEKRGRKATSGKKGKSKAAKPRTSKSKPKDSDKEGTSNST SEDGPGDGFTILSSKSLVLGQKLSLTQSDISHIGSMRVEGIVHP TTABIDLKEDIGKALEKAGGKEFLETVKELRKSQGPLEVAEAAV SQSSGLAAKFVICHIPQWGSCKCEQLEETIKNCLSAEDBK LKSAFFPPFPSSGRNCFPKQTAQVTLKAISAHFDDSSASSLKNNVY FLLFDESISIGIYVQEMAKLDAK |
| 6231 | 149 | 870 | LIFSSTMDRSLRNVLVVSFGFLLFTAYGGLQSLQSSLYSEEG LGVTALSTLYCGMLLSSMFLPPLLIERLGCKGTIILSMCGYVAF SVGNFFASWYTLIPTSLILGLGAAPLWSAQCTYLTITGNTHAEK AGKRKQDMVNQYFGIFLIFQSSGVWGNLISSLVFGQTPSQETL PEBQLTSCGASDCLMATTTTNTSTORPSQQLVYTLGITYGSGVL AVLMIAAFLQPIRDVQRESE |
| 6232 | 3679 | 1476 | FVAGTTMAGFWGTAPLVAAGRRGRWPPQQLMLSAALRTLKHVL YYSRQCLMVSRNLGSGYDPEKTFDKILVANRGEIACRVIRTC KKMGIKTVAIHSDDVASSVHVMADEAVCVGPAPTSKSYLNMDA IMEAIKKTRAQAVHPGYGFLSENKEFARCLAAEDVVFIGPDTHA IQAMGDKIESKLLAKKAEVNTIPGFDGVVDAEEAVRIAREIGY PVMIKASAGGGGKGMRIAWDDEETRDGFRLLSSQEAASSFGDDRL LIEKFIDNPRHIEIQVLGDKHGNALWLNRECSIQRRNQKVVEE APSIFLDAETRRAMGEQAVALARAVKYSSAGTVEFLVDSKKNFY FLEMNTRLQVSHPVTECITGLDLVQEMIRVAKGYPLRHKQADIR INGWAVECRVYAEOPYKSPGLPSIGRLSQYQEPHLPGVRVDSG IQPGSDISIYYDPMISKLITYGSDRTEALKRMADALDNYVIRGV THNIALLEVIINSRFBVKGDISTKFLSDVYPDGFKGHMLTKSEK NQLLAIASSLFVAFQQLRAQHFQENSRMPVVKPDIANWELSVKLH DKVHTVVASNNGSVFSVEVDGSKLVNTSTWNLASPLLSVSDGT QRTVQCLSRAGGNMSIQFLGTIVYKVNILTRLAELNKFMLEKV TEDTSSVLSRSPMPGVVAVSVKPGDAVAEGQEICVIEAMKMQNS MTAGKTGTVKSVCQAGDVTGEGDLLVELE |
| 6233 | 1 | 2654 | HSTRENLNAGNPNFPSEHGLVRSTGPGGSFAKHMVAQCVPKGP |

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|------------|--|--|---|
| | | | LACSRTYFFGATHVPYLGGSKLPPKTEQIRLLSQIYAAVIEAV LAGIACYAKTSSSLTKAKEVAEQTLLGSGLDSEFELIPFKAALRSKM TFHIHAVNNOGRIVPLDSEDSLSFVKTACMAVYDIPDLLGGNGC LGSVVFSESLTSQILVKEKDGTVTTTSSVLTAAVPRFCSWL VEDNEVLSEKTHQAVRGDESFLGTLYLTGGEGAYLYSSNLQSWP EEGNVHFFSSGLLFSHCRHGSIIISKDHMSISFYDGDSTSTVA ALLIDFKSSLLPHLPVHFHSSNPLMIALFPKSKIYQAFYSEV SLWKQODNSGISLKVIEDGLSVEQKRLHSSAQKLSALSQAPAG EKRSSLKLSSAKLPDLWFLQHFAPSSISQEPVMRTHLPVLLQ AEINTTHRIESDKVIIISIVTGLPGCHASELCAFLVTLHKECGRW MVYRQIMDSSECFHAAHFQRYLSSALEAQQRNSARQSAYIRKKT RLLVVLQGYTDVIDVQALQTHPDSNVKASFITGATACVEPMS CYMEHRFLFPKCLDQCSQGLVSNVFTSHTTEQRHPLLVQLQSL IRAANPAAAFILAENGIVTRNEDIELILSENSFSSPEMLRSRYL MYPGWYEGKLNAGSVYPLMVQICVWFGPRPLEKTRFVAKCKAIQS SIKPSFPFSGNIYHILGKVKFSDSERTMEVCYNTLANSLSIMPVL EGPTPPPPDSKSVSQDSSGQCECYLVFIGCSLKEDSIKDWLRQSA KQKQKALKTRGMLTQOEIRSIHVKKHLEPLPAGYFYNGTQFV NFFGDKTDFHPLMDQFMNDYVEEANREIEKYNQLEQQEYHDLF ELKP |
| 6234 | 1731 | 404 | PRVREDMDHKSFGNKGSLVYAGIKSIVKSSLGMVESSRHNWSGL DKQSDIQNLNEERILALQLCGWIKKGTDDVDPFNLNSLVQEGEW ERAAVALFNLDIRRAIQILNEGASSEKGDNLNINNVAMALSGYT DEKNSLWREMCSTLRLQLNPNYLCVMFAFLTSETGSYDGVLYEN KVAVRDRVAFACKELSDTQLNRYIEKLTNEMKEAGNLEGI LLTG LTKDGVLDLMEYVDRITGDVQTASYCMIQGSPLDVLKDERVQYWI ENYRNLDDAWRFWHKRAEFDIHRSKLDPSSKPLAQVFSVSCNFCG KSISYSCSAVPHQGRGFSQYGVSGSPTKSKVTSCPGCRKPLPRC ALCLINMGTPVSSCPGGTKSDEKVDLSKDKKLAQFNWFTWCHN CRHGGHAGHMLSWFRDHAECFVSACTCKCMQLDTTGNLVPAETV QP |
| 6235 | 1 | 571 | EKRDRHRLPSWPRAALKVPGRGGRVGTTPELAAGGIMATRNPPFQ DYESDDDSYEVLDLTYEYARRHQWNRVFGHSSGPMVEKYSVATQ IVMGGVTGWACAGFLFQKVGKLAATAVGGGFLLLQIASHSGYVCI DWKRVEKDVNKAQRQIKKRANKAAPEINNLIIEATEFIKQNI SSGFVGGFLLGLAS |
| 6236 | 1 | 703 | WDQNGGAAAGSGLTPLPSLPSARFSAGPPTQSRPTMSNMEKHLF NLKFAAKELSRSAKKCDKEEKAEEKAKIKKAIQKGNMEVARIHAE NAIRQKNQAVNFLRMSARVDAVAARVQTAVTMGKVTKSMAGVVK SMDATLKTMLNLEKISALMDKFEHQFETLDVQTQOMEDTMSSTTT LTPQONQVDMLLQEMADEAGLDLNMELPQGGTGSVGTSVASAEQ DELSQRLARLRDQV |
| 6237 | 312 | 720 | PTAMAEEGIAAGGVMDVNTALQEVLTALIHDLGARGIREAAKA LDKRQALCVLASNCDEPMYVKLVEALCAHQINLIKVDNKKL GEWVGLCKIDREGKPRKVVGCSCVVVKDYGKESQAKDVIEEYFK CKK |
| 6238 | 2 | 4666 | EBVPTQESVKWEINVIKNEPIVFVADMTKNDAPALVITTQCEI CYKGNLENSTMTAAIKDLQVRACFFLPVKRKGKITTVLQPCDLF YQTTQKGTDPQVIDMSVKSLLTKVSPIINTMITITSALYTTKE TIPEETASSTAHLWEKKDTKTLKMWFLEESNETEKIAPTTELVP KGEMIKMNIDSIFIVLEAGIGHRTVPMLLAKSRFSGEGKNWSSL INLHCQLELEVHYNNEMFGVWEPLLEPLEIDQTEDFRPWNLGK MKKKAKMAIVESDPPEENYKVPYKTVISFHSKDQLNITLSKCG LVMLNNLVKAFTEATGSSADFKDLAPFMILNSLGLTISVSPS DSFVSLNIPMAKSYVLKNGESLSMDYIRTKDNDFNAMTSLSSK LFFILLTFVNHSTADKIPLTQVGRRLYTVRHRESGVERSIVCQI |

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|------------|--|--|--|
| | | | <p>DTVEGSKKVTIRSPVQIRNHFSVPLSVYEGDILLGTASPENEFN IPLGSYRSFIFLKPEDENYQMCCEGIDFEEIINKDGAALLKKKCRS KNPSKESFLINIVPEKDNLTSLSVYSEDGWDLPYIMHLWPPILL RNLLPYKIAYYIEGIENSFVTLSEGHSAQICTAQLGKARLHLKL LDYLNHDWKSEYHIKPNQQDISFVSTCVTEMEKTDLDIAVHMT YNTGQTVAFAHSPYWMVNKTGRMLQYKADGIHRKHPPNYKKPVL FSFQPNHFFNNNKVQLMVTDSBLSNQFSIDTVGSHGAVKCKGLK MDYQVGVITIDLSFNITRIVTFTPFYMIKNKSKYHISVAEGND KWLSDLLEQCIPFWPEYASSKLLIQVERSEDPPKRIYFNKQENC ILLRLDNELGGIIAEVNLAEHSTVITFLDYHDGAATFLLINHTK NELVQYNQSSLSIEDSLPPGKAVFYTWADPVGSRRLKWRCKRS HGEVTKQDDMMMPIDLGEKTIYLVSFEEGLQRIILFTEDPRVFK VTYSEKAEALAEQETIAVALQDVGISLVNNYTKQEVAYIGITSSD VWVETKPKKKARWKPMKSVKHTKLEREFKBYTESSPSEDKVIQL DTNVPVRLTPTGHNMKILQPHVIALRRNYLPALKVEYNTHSAQS SFRIQIYRIQIQNIHGAVFPFVFPVKPKSVTMDSAPKPTFD VSIWMRSAGHSQISRIKYFKVLIQEMDLRLDLGFIYALTDLMTE AEVTENTEVELFHKDIEAFKEEYKTASLVDQSQVSLYEYFHTSP IKLHLSVSLSSGREEAKDSKQNGGLIPVHSLNLLKLSIGATLTD VQDVVFKLAFFELNYQFHTTSDLQSEVIREHYSQAIKQMYVLIL GLDVLGNPFGILREFSEGVFAFFYEPYQGAIQGPEEFVEGMALG LKALVGGAVGCLACAASKITGAMAKGVAAMTDEDDYQQRREAM NKQPAQFREGITRGKGLVSGFVSGITGIVTKPIKGAQKGGAG FFKGVGKGLVGAVARPTGGIIDMASTTFQIKRATETSEVESLR PPRFNEDGVIRPYRLRDTGNQMLQKIQFYREWIMTHSSSSDD DDDDDDDESDDLNH</p> |
| 6239 | 2108 | 634 | <p>KPGMAGKSSGSRPLLLGLLVAATVHLVICPYTKVEESFNLOA THDLLYHWQDLEQYDHLFEPGVVPRFTFLGPVVLAVFSSPAVYVL SLEMSKFYSQLIVRGVGLGVIFGLWTLQKEVRRHFGAMVATM FCWVTAMQPHLMFYCTRTLPNVLALPVLLALAAWLRHEWARFI WLSAFIIIVRV3LCFLGLLLLLALGNRKVSVVRLRHAVPAG ILCLGLTVAVDSYFWRQLTWPEGKVLWYNTVLNKSSNWGTSPLL WYFYSALPRGLGCSLLFTPLGLVDRRTAFTVLALGFALYSL PHKELRFIIYAF2MLNITAARGCSYLLNNYKKSPLYKAGSLLVI GHLVVNAAYSATALYVSHFNYPGGVAMQRLHQLVPPQTDVLLHI DVAAAQTVSRFLQVNSAWRYDKREDVQPGTGMLAVTHILMEAA PGLLALYRDTHRVLASVVGTTGVSLLNLTLQPLPPFNVHLQTKLVLL ERLPRPS</p> |
| 6240 | 2202 | 1176 | <p>HERGDSLKEPTSLAESRRHPSYRSEFSLPESEFRSPFTGKSFHF DPLSSGSRSSSLKSAQGTGFELGQLQSIRSEGTSTSYKSLANQ TRNGSLSYDSLTPSDSPDFESVQAGPEPDPLGYTSPFLSARL AQQREAEHRHRLVPTGPTHR3SPVRYDNLSRHIVASLQEREKL LRQSPPLPGREEEPGLGDSGIGSTPGSGHAPRTSSSSDDSKRSP LGKTPLGRPAVPRFGKPDGLRGRGVGSPEPGPTAPYLGRSMSYS SQAQPGVSETEEVALQPLLTPKDEVQLKTTYSKSNQPKSLGS ASPGPGQPLSSPTRGGVKVSGVGGTTYEISV</p> |
| 6241 | 3 | 1341 | <p>RNAEEKRLSLQREKTIARVSDNRTRALVQALRRTTDPKLCIT RVEELTFHLLFEPGKGVAVKERIIPYLLRLRQIKDETLLQAQAVR ETLALIGYVDPVKGRGIRILSIDGGGTGRGVVALQTLRKLVELTQ KPVHQLFDYICGVSTGAILAFMLGLFHMPLDECEELYRKLGSVD FQGNVIGTVKMSWSHAFYDSQTWENILKDRMGSAIMIETARNP TCPKVAAVSTIVNRGITPKAFVFRNYGHFPGINSHYLGCCQYKM WQAIRASSAAPGYFAEYALGNLDLHQDGLLLNNPSALAMHECKC LWPDVPLECIVSLGTGRYSDVNTVTYTSKTKLSNVINSATD TEBVHIMLDGLLPDPTYFRFNPVMCENIPLDESRENEKLDQLQLE GLKYIERNEQMKMKVAKILSQEKTTLQKINDWIKLKTDMYEGLE</p> |

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|------------|--|--|--|
| 6242 | 198 | 1310 | FFSKL QHFLPGAETWSPGAAVCTARRFPGRSLAAPPRAAPRAVEMGE SSEDIDQMFSTLLGEMDLLTQSLGVDLTPPPDPNPRAEFNYSV GFKDLNESLNALEDQDLALMADLVADISEAQRTIQAKESLQ NQHHSASLQASIFSGAASLGYGTNVATGISQYEDDLPPPPADP VLDLPLPPPPPEPLSQEEREAQAKADKIKLLEKLKEAKVKLV VKVHMNDNSTKSLMVDERQLARDVLDNLFKTHCDNVDWCLYE IYPELQIERFFEDHENVVVLSDWTRDTENKILFLEKEEKYAVF KNPQNFYLDNRGKESKETNEKMNAKNKESLLEVRLLILQSGRKE KDVCSIFKSFASENNGKI |
| 6243 | 1509 | 614 | RSASRFSGCWSRDSTCCCPSTCWSRSSASCPRARWPPSSAPAT TSRASSRRLACGPQTRAGAE TRSTAMIRANSARDTRATCRSA AGTPSPPTMTCLTDVPTGCAAVEPTARLPAAAWASTITGCCPA MQQAGAGPAGRGKSEAGGGPGRAHHAHPSPLPREPRVTRGPAPAH SPTPGSIDPSPELSWGSAGVTQESPLLDVDFLLFRTRAVDFLR RVFFFFYQHLTFPSIQPPPPCHAFHPRDEPPAGTKRQLILVPLK GPPILAPILSLTPILSRWSCYFPRSRIAQGWHL |
| 6244 | 2119 | 1745 | FEHAYASQFGTFLGNNESEKCKLQKQKMSLWSWVNQPSLSK FTNPLFEANNLVIWPSVAPQSLPLWEGIFLRWNRSSKYLDEAYE EMVNIIEYNKELQAKVNILRRQLAELETEDEGMQESP |
| 6245 | 81 | 1148 | LSLRNAKYSFPQELISLFSMTDLNDNICKRYIKMITNIVILSLI ICISLAFWIISMTASTYYGNLRPISPWRNLFVSVVPLIVSNGL KKKSLDHSGALGGLVVGFIITIANFSFFTSLLMFFLSKLTWK KGEVKKRLDSEYKEGGQRNVQVPCNGAVPTLALYMIENGP EIPVDFSKQYSASWMLSLAALACSAGDTWASEVGPVLSKSSP RLITTEKVPVGTNGGVTVVGLVSSLLGGTFVGIAYFLTQLIFV NLDLISAPQWPIIAFGGLAGLLGSIIVSYLGATMQYTGLDESTG MVVNSPTNKARHIAKPILDNNAVNLFSSVLIALLLPTAANGFW PRG |
| 6246 | 1177 | 359 | SLWPFILMDDSLMQISLQQLCVYTANFPNGCSSLCWSSCGQHPV QATHRGAVNSNMLCILKLASOMPLENTTVQMVFMLLSNLALS HDCKGVIQKSNFLQNFSLALPKGGNKHLSNLTILWLKLLNIS SGEDGQOMILRLDGLDCLLTEMISKYKHKSSPLPLLIHNVCF PANKPKILANEKVITVLAACLESENQNAQRIGAAALWALTYNQ KAKTALKSPSVKRRVDEAYSLAKKTFPNSEANPLNAYYLKLEN LVQLNNS |
| 6247 | 3 | 1678 | NSRVWGPWTEPSAGSLRPMARKQNRNSKELGLVPLTDDTSHAGP PGPGRALLECDHLRSGVPGRRRKDWSCSLLVASLAGAFGSSFL YGNLSVVNAPTPYIKAFYNESWERRHGRPIDPDTLTLWSVT SIFAIGGLVGTILVKMIGKVLGRKHTLLANNGFAISAALLMACS LQAGAFEMLI VGRFIMGIDGGVALSVLPMVLSISPKEIRGSLG QVTAIFICIGVFTQQLGLPELLGKESTWPLYFGVIVVPAVQV LSLPLPDSPRYLLLEKHNEARAVKAFOTFLGKAHVSQEVVEVL AESRVQRSIRLVSVLELLRAPYVRWQVVTIVITMACYQLCGLNA IWFYTNSIFGKAGIPPAKIPYVTLSTGGIETLAAVFSGLVIEHL GRRPLLIIGFGMLGFFGTITITLQDHAPWPVYLSIVGILAI IASFCSGPGGIPFILTGEFFQQSQRPAAFIAGTVNWSNFAVG LLFPFIQKSLDTCFLVFATCITGAIYLYFVLPETKNRTYAEI SQAFSKRNKAYPPEEKIDSAVTDGKINGRP |
| 6248 | 56 | 1773 | VPPPRMAAVPPGLEPWRNRVIRPKAGNRSAVTQNPAAALDLCT AAVIKECHLVILSLKSQTLDAETDVLCAVLYSNHNRMRGHRKPHL ALKQVEQCLKRLKNMNLGSIQDLFELFSSNENQPLTTKVCVVP SQPVVELVLMKVLGACKLLRLDCCCKTFLLTVKHILGLQEFII LNLVMVGLVSRWVLYKGVLRLLLYEPLFGLLQEVARIQPM YKDFTFPSDITEFLGQPYFEAFKKMPFAFAAKGINKLLNKL LINEQSPRASETLLGISKKAKQMKINQNNVDLGQPVKNRV |

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|------------|--|--|---|
| 6249 | 56 | 1773 | KEESSEFDVRAFCNQLKHKATQETSFDFKCSQSRLKTTKYSSQK VIGTPHAKSFVQRFREAESFTQLSEEIQMAVVWCRSKKLKAQAI FLGNKLLKSNRLKHLEAQGTSLPKKLECIKTSICNHLRGSGIK TSKHHLRQRRSQNKFLRRQRKPQKQLQSTLLREIQQFSQGTGRKS ATDTSAKWRLSHCTVHRTDLYPNSKQLLNSGVSMPIQTKEKMI HENLRGIHENETDSWTVMQINKNSTSGTIKETDDIDDIFALMGV VPPPRMMAAVPPGLEPWNVRVTPKAGNRSVAVTQVNPGAALDLICI AAVIKECHLVLSLKSQTLDAETDVLCAVLYSNHNRMRGRHKPVL ALKQVEQCLKRLKNMNLGESSIQDLFELFSSNENQPLTTKVCVVP SQPVVELVLMKVLGACKLLRLDCCCKTFLLTVKHLGLQEFII LNLVMVGLVSRLLWVLYKGVLRRLILLYBPLFGLLQEVARIQPMF YFKDFTFPSDITEFLGQPYFEAFKKKMPIAFAAGINKLNLKLF LINEQSPRASEETLLGISKKAKQMKINVQNNVDLQGPVKNKRVF KEESSEFDVRAFCNQLKHKATQETSFDFKCSQSRLKTTKYSSQK VIGTPHAKSFVQRFREAESFTQLSEEIQMAVVWCRSKKLKAQAI FLGNKLLKSNRLKHLEAQGTSLPKKLECIKTSICNHLRGSGIK TSKHHLRQRRSQNKFLRRQRKPQKQLQSTLLREIQQFSQGTGRKS ATDTSAKWRLSHCTVHRTDLYPNSKQLLNSGVSMPIQTKEKMI HENLRGIHENETDSWTVMQINKNSTSGTIKETDDIDDIFALMGV LAALHIMALPFRKDLKVKDLDEDELGNLSETELKQLETVLDD LDPENALLPAGFRQKNQTSKSTTGPFDREHLLSYLEKEALEHKD REDYVPYTGEEKGKIFIPKQKPVQTFTEEKVSLDPELEALISA SDTELCDLAAIILGMHNLITNTKFCNIMGSSNGVDQEHFSNVVKG EKILPVFDEPPNFTNVEESLKRTKENDAHLEVNLIKNIP TLKDFAKALETNTHVKCFSLAATRSNDPVATAFAEMLKVNKTLK SLNVESNFTITGVGILALIDALRDNETLAEKIDNQROQLGTAVE LEMAKMLEENTNILKFGYQFTQQGPRTAANAITKNNDLVRKRR VRGDHQ |
| 6250 | 232 | 1306 | LAALHIMALPFRKDLKVKDLDEDELGNLSETELKQLETVLDD LDPENALLPAGFRQKNQTSKSTTGPFDREHLLSYLEKEALEHKD REDYVPYTGEEKGKIFIPKQKPVQTFTEEKVSLDPELEALISA SDTELCDLAAIILGMHNLITNTKFCNIMGSSNGVDQEHFSNVVKG EKILPVFDEPPNFTNVEESLKRTKENDAHLEVNLIKNIP TLKDFAKALETNTHVKCFSLAATRSNDPVATAFAEMLKVNKTLK SLNVESNFTITGVGILALIDALRDNETLAEKIDNQROQLGTAVE LEMAKMLEENTNILKFGYQFTQQGPRTAANAITKNNDLVRKRR VRGDHQ |
| 6251 | 62 | 972 | TPGSGPMSAWAAASLSRAAARCLLARGPGVRAAPPDRPRPSHPE PRGCGAAPGRTLHFTAAVPAHGNKWSKVRHIKGPDKDVERSRIFS KLCLNIRLAVKEGGPNPEHNSNLANILEVCRSKHMPKSTIETAL KMEKSKDTYLLYEGRGPGGSSLLIHALSNSSHKCQADIRHILNK NGGVMVAGARHSFDKKGVI VVEVEDREKKAVNLERALEMAEAG AEDVKEDEDEERNVFKFICDASSLHQVRKKLDSLGLCSVSCAL EFIPNSKVQLAEPDLEQAHLIQALSNEHDVTHVYDNIE |
| 6252 | 27 | 1897 | EEFCTWIAVRVGEMETAPKPGKDVPPKKDKLQTKRKKPRRYWEE ETVPTTAGASPGPPRNKNRELPRQRPKNAYILKKSRIKPKQV PKKPREWKNPESQRLSGAQDPFGPAPVPVVEVQKFCRIDKSR KLPHSKAKTRSRLEVAEAEETSIKAARSELLLAEEPGFLEGE DGEDTAKICQADIVEAVDIAAAKHFDLNLRFQGPYRLNYSRTG RHAFGGRRGHVAALDWVTKKLMCEINVMEAVRDIRFLHSEALL AVAQNRWLHIYDNQGIELHCIRRCRDVTRLEFLPPHFLATASE TGFLTYLDVSVGKI VAALNARAGRLDVMSQNPYNAVILHGHSG TVSLWSPAMKEPLAKILCHRGGRVRAVADSTGYMATSGLDHQL KIFDLRGTYQPLSTRITLPHGAGHLAPSQRGLLVAGMGDVVNIWA GQKASPPSLEQPYLTHRLSGPVHGLQFCPFEDVLGVGHTGGIT SMLVPGAGEPNFDGLESNPYRSRKQRQEWVKALLEKVPALIC LDPRALAEVDVLSLEQKKEQIERLGYDPAKAPFQPKPKQGR SSTASLVKRRKVMDEEHRDKVRQSLQQQHHKEAKAKPTGARPS ALDRFVR |
| 6253 | 27 | 1897 | EEFCTWIAVRVGEMETAPKPGKDVPPKKDKLQTKRKKPRRYWEE ETVPTTAGASPGPPRNKNRELPRQRPKNAYILKKSRIKPKQV PKKPREWKNPESQRLSGAQDPFGPAPVPVVEVQKFCRIDKSR KLPHSKAKTRSRLEVAEAEETSIKAARSELLLAEEPGFLEGE DGEDTAKICQADIVEAVDIAAAKHFDLNLRFQGPYRLNYSRTG RHAFGGRRGHVAALDWVTKKLMCEINVMEAVRDIRFLHSEALL |

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|------------|--|--|---|
| | | | AVAQNRLHIYDNQGIELHCIRRCRDVTRLEFLPFHLLATASE TGFITYLDVSVGKIVAALNARAGRLDVMQNPYNAVHLSHNSG TVSLWSPAMKEPLAKILCHRGVRAVAVDSTGYMATSGLDHQL KIFDLRGTYQLSTRTPHAGHLAFSQRGLLVAGMGDVVNIWA GQKASPPSLEQPYLTHRLSGPVHGLQCFPFEDVLGVGHTGGIT SMLVPGAGEPNFDGLESNPYRSRKQRQEWVKALLEKVPALIC LDPRLAEVDVISLEQGGKEQIERLGYDPAKAPFPKPKQKGR SSTASLVKRRKVMDEHRDKVRQSLQQQHHKEAKAKPTGARFS ALDRFVR |
| 6254 | 155 | 1139 | HALGRRGGSQELSAACGCFALRLRAPGSGRPALAPGAAAFAGL GGAPRFPFPRGSAAGRTMLLKEYRICMPLTVDEYKIGQLYMISKH SHEQSDRGEVGVQNEPFFDPHNGNGQTEKRVYLSKLPSWA RAVVPKIFYVTEKAWNYPPYTITEYTCSPFKFSIHETKYEDN KGSNDTIFDNEAKDVEREVCFDIACDEIPERYKESDPKHFK SEKTGRGQLREGWRDSDHOPIMCSYKLVTVKFEVWGLQTRVEQFV HKVVRDILLIGHRQAFVWDEWYDMTDDVREYKEMHEQNTNIK VCNQHSPPVDDIESHAQTST |
| 6255 | 1 | 1444 | PTRPQQLLVSLATVIFVASQKALSVEKAVIKQQLSESVNGWT VYRIARQASRMGNHDMAKELYQSLLTQVASKHFYFWLNSLKEFS HAEQCLTGLQEENYSSALSCIAESLKFYHKGIASTAASTPLNP LSFQCEVFKLRIDLQAFSGLICTNSLKTSPPAIATTIAMTL GNDLQRCGRISNQMKQSMEEFRSLASRYGDLYQASPDADSATLR NVELQQQSCLLISHAIEALILDPESASFQEYGSTGTAHADSEYE RRMMSVYNHVLVEEVESLNGKYTPVSYMHTACLCAI IALLKVPL SFQRYFFQKLQSTSIKLALSPSPRNPAEPIAVQNNQQLALKVEG VVQHGSKPGLFRKIQSVCLNVSSLTQSKSGQDYKIPIDNMTNEM BQVPEPHNDYFSTQFLNFAILGTHNITVESVVDKANGIVWKTG PRTTTFVKSLDPYSQQIRLQQQQAQQLQQQQQRNAYTRF |
| 6256 | 1 | 1542 | CRGAGAEPANPRSPRLVPSLESTSTSVFPFPGTMTDSWALA VDEQEAAAEALSNLHLKEEKIKPDITNGAVVKTNAEKTDEEEK EDRAAQSLNKLIRSNLVDNTNQVEVLQDRPNSPLYSVKSFEEL RLKPQLLQGVYAMGFNRPSKIQENALPLMLAEPQNLIAQSQSG TGKTAAFVLAMLSQVEPANKYPQCLCLSPTYELALQTKVIEQM GKFPYELKLAYAVRGKLERGQKISEQIVIGTPGTVLWDWCSKLK FIDPKKIKVFLDEADVMIATQGHQDQSIQIRMLPRNCQMLLF SATPEDSVWKFQKVPDPNVIKLREBEETLDTIKQYVVLCSRR DEKFQALCNLYGAITIAQAMIFCHTRKTASWLAELSKEGHQVA LLSGEMMVQRAAVIERFREGKEKVLVTNVCGRIDVEQVSVV INFDLVPDKDGNPDNETYLHRIGRTRFGKRGGLAVNMVDSKHSN NILNRIQEHFNKKIERLDTDDLDEIEKIAN |
| 6257 | 210 | 615 | AFIPAMAEIQLKQLQGEVEKYQQLQKDLKSMSGRQKLEAQLTE NNIVKEELALLDGSNVVFKLLGPVLVKQELGEARATVGKRLDYI TAEIKRYESQLRDLERQSEQQRETLAQLQQEFQRAQAAKAGAPG KA |
| 6258 | 210 | 615 | AFIPAMAEIQLKQLQGEVEKYQQLQKDLKSMSGRQKLEAQLTE NNIVKEELALLDGSNVVFKLLGPVLVKQELGEARATVGKRLDYI TAEIKRYESQLRDLERQSEQQRETLAQLQQEFQRAQAAKAGAPG KA |
| 6259 | 2 | 1540 | ILEKGFPSQCHPERKWKVDDVLESSQENEDDHFWEELFHNNKTV SVENGDRGSKTFNLGTPVSLRNPYKICDSCENLNKISGLII SKNCNSRKKPDEFNVCEKLLDIRHEKIPIGESYKYDQKRNAI NYHQDLSQPSFGQSFEYSKNGQGFHDEAAFFTNKRSQIGETVCK YNECGRTFIESLKLNISQRPHLEMEPYGCSICGKSFCMNLRFHGH QRALTNDNPEYNEYEGEIFCDNSAFIIHQGAYTRKILREYKVSD KTWKSALLKHQIVHMGGSYDYNENGSNFSKKSHTQLRRAHT GEKTFECGECGKTFWEKSNLTQHQRTHTEKPYECTECGKAFCQ |

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|------------|--|--|--|
| | | | KPHLTNQHRTHTGKPYECKQCGKTFCCVNSLTHEQRTHTGKPYECNACGKSFCHRSALT VHQRTHTGKPFICNECGKSFVCVNSLIVHQRTHTGKPYKCNCEGKTFCEKSALTQHQRTHTGKPYECNACGKTFQSQRSVLTQKHQRIHTRVKALSTS |
| 6260 | 2081 | 1436 | GTGPEITHACAHASARAPGSRAMALRELKVCLLGDTGVGKSSIVWRFVDSFDPNINPTIGASFMTKTQYQONELHKFLIWDTAGQERF RALAPMYRGSAAAIIVYDITKEETFTLKNWVKELRQHGPPII VVAIAGNKCDLIDVREVMERDAKYADSIHAFVETSANAINI NELFTIISRIPST DANLPSSGGKGFKLRRQPSSEPKRSCC |
| 6261 | 3 | 1188 | FWYRLGPGTRSRWRPRGSSWAASLVPRGSPAPALVTSFCPPDPLRSPACEPCRPDFAPRPALLRLSGPRSPAPVTKGPKLKGQPGWPWGMAEVSIDQSKLPGVKEVCRDFAVLEDHTLAHSLQEQEIEHHLAS NVQRNRLVQHDLOVAKQLQEQEDLKAQAQLKRYKDLEQQDCEIA QEIQEKLAIEAERRRIQEKKDEDIARLLQEKELQEEKRKKHFP EFPATRAYADSYVYEDGGMKPRVMKEAVSTPSRMAHRDQEWYDA EIAKRLQEBELLATQVDMRAAQVAQDEEIAARLLMAEEKKAYKKA KEREKSSLDKRRQDEWKPCTAKAANSKSKESDEPHHSKNERPA RPPPPIMTDGEDADYTHFTNQSSSTRHFSKSESSHKGFFHYKH |
| 6262 | 2 | 1759 | PECHSQGLCSVHRPGKVPQARMGSLVGLGQDEPAGHRLSQEEL GSTRLVSQGLEALRSEHQAVLQSI.SQTIECLQGGHEEGLVHEK ARQLRRSMENIELGLSEAQVMLALASHLSTVESEKQKLRAQVRR LCENQWLRDELAGTQQLRQSEQAQAQLEEEKKHLEFLGQLRQ YDEDGHTSBEKEGDATKDSLDDLFPNEEEDPSNGLSRGGGATA AQQGGYIEIPARLRLTHNLVIOYAAQGRYEVAVPLCKQALEDLER TSGRGHDPVATMLNIALVYRDQNKYKEAAHLLNDALSIRESTL GPDPHPAVALTNLNLAVLYGKRGKYKEAEPLCORALEIREKVLGT NHPDVAQQLNNLALLCQNGKYEAVERYQALAIYEGQLGPDN PNVARTKNNLASCYLKQGYAEATLYKEILTRAHVQSEFGSVDD DHKPIWMHAEEREEMSKSRHHEGGTPYAEYGGWYKACKVSSPTV NTTLRNLGALYRRQKLEAAETLEECALRSRRQGTDPISQTKVA ELLGESDGRRTSQEGPGDSVKFEGGEDASVAVESWGDGSGTLQR SSGSLGKIRDVLRR |
| 6263 | 1 | 2408 | RELDSLADLPERIKPPYANGLSTSHLRSSSVEDVKLIISEGRPT IEVRRCSMPFSVICHETKQFQTISEESNQGSLLTVPGDTSPPSPKP EVFSNVPERDLNVSNIHSSFATSPGTASNSKYVSADRNLIKNT APVNTVMDSPVHLEPSSQVGVQNKSWEMPVDRLETSTRDFIC PNSNIPDQESSLQSFNCSENKVLKENADFLSLRQTELPNGSCAQ DPASFMPQQPCSFPSQSLSDABSISKHMSLSYVANQEPGILQQ KNAVQIISSALDTDNESKTENTFVLGDVQKTDAPVPVYSDST IQEASPNFEKAYTLPLVPSEKDFNGSDASTQLNTHYAFSEKLTYS SSGHEVENSTDTQVISHEKENKLESVLTHLSRCDSDLCMN AGMPKGNLNEQDPKHCPESEKCLLSIEDEESQSSILSSLENHSQ QSTQPEMHKYGLVKVELEENAEEDKTENQIPQRMTRNKANTMA NQSKQILASCTLLSEKDESSSPRGRIRLTEDDDPQIIHPRKRK VSRVPQPVQVSPSLLOAKEKTQQSLAAIVDSLKLDEIQPYSSER ANPYFYLHIRKKIEEKRLLCVPIQAPQYVDEYVTFNGSYLL DGNPLSKICIPTITPPFSLSDPLKELFRQQEVVRMKLRLQHSIE REKLIVSNEQEVLRVHYRAARTLANQTLFSACTVLLDAEVYNV PLDSQSDSKTSVRDRFNARQFMSWLQDVDDKFDKLTCTLMRQ QHEAALNAVORLEWQLKLQELDPATYKSIISYIEIQEFYVPLVD VNDDEFELTPI |
| 6264 | 143 | 1960 | KHRQENNALDMAPEIAMTGMCLIENTNGELVANPEALKILSAT TQPVVVVAIVGLYRTGKSYLMNKLAKGKNGFSLGSTVKSHTKGI WMCVPHPKKPEHTLVLLDTEGLGDVKKGDNDQNSWIFTLAVLL SSTLVNSMGTINQAMQQLYYVTETLHRIKSKSPDENENEDS ADFVSFFPDPFVWTLRDFSLDLEADGQPLTPDEYLEYSLKLTQGT |

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|------------|--|--|---|
| | | | SQKDKNFNLPRLCIRKFFPKKKCFVFDLPFHRRKLAQLEKLQDE ELDPEFVQVADFCSYIFSNSTKTLSSGGIKVNGPRLESVLTY INAI SRGDLPCMENAVLALAQIENSAAVQKATAHYDQMGQKVQ LPAETLQELLDLHRVSEEREATEVYMKNSEKDVHDLFQKKLAAQL DKKRDDFCKQNEASSDRCSALLQVIFSPLEEEVKAGIYKPGG YCLFIQKLQDLEKKYEEPRKGIQAEELQTYLKSKEVTDAIL QTDQILTEKEKEIEVECVKAESAQASAKMVEEMQIKYQMMEEK EKSYQEHVKQLTEKMERERAQLEEQEKTLSKLQEQARVLKER CGESTQLQNEIQKLQKTLKKTKRYMSHKLKI |
| 6265 | 143 | 1960 | KHRQENNALDMAPEIHMGTGPMCLIENTNGELVANPEALKILSAI TQPVVVVAIVGLYRTGKSYLMNKLAKNGKGLSGSTVKSHTKGI WMWCVPHPKPEHTLVLLDTEGLDVKKGDNDNSWIFTLAVLL SSTLVNSMGTINQAMDQLYYVTELTHIRSKSSPDENENEDS ADVFVSFFPDFVWTLRDFSLDLEADGQPLTPDEYLEYSKLTLQGT SQKDKNFNLPRLCIRKFFPKKKCFVFDLPFHRRKLAQLEKLQDE ELDPEFVQVADFCSYIFSNSTKTLSSGGIKVNGPRLESVLTY INAI SRGDLPCMENAVLALAQIENSAAVQKATAHYDQMGQKVQ LPAETLQELLDLHRVSEEREATEVYMKNSEKDVHDLFQKKLAAQL DKKRDDFCKQNEASSDRCSALLQVIFSPLEEEVKAGIYKPGG YCLFIQKLQDLEKKYEEPRKGIQAEELQTYLKSKEVTDAIL QTDQILTEKEKEIEVECVKAESAQASAKMVEEMQIKYQMMEEK EKSYQEHVKQLTEKMERERAQLEEQEKTLSKLQEQARVLKER CGESTQLQNEIQKLQKTLKKTKRYMSHKLKI |
| 6266 | 276 | 1421 | GSHQKQMLVPCFLYSLQNRKPSLYGSLTCQIGLGDGIPVETASE GFTVNEINKKSIHISCPKENASSKFLAPYTFSTRITKSIITCLD ISSRGGGLGVSSSDGTMKIWAQASNGELRRVLEGHVFDVNCRRF PSGLVVLGGMDAQLKIWSAEDASCVVTFKGHKGGLDITAVDR GRNVVSASRDGTARLWDGCRSACGLVLADCGSSINGVAVGAADN SINLGSPEQMPSEREVGTEAKMLLLAREDKKLQCLGLQSRQLVF LFIGSDAFNCCFTLSGFLLLAGTQDGNIIYQLDVRSPRAPVQVIH RSGAPVLSLLSVRDGFIASQGDGSCFIVQDLDYVTELTGADCD PVYKVATWEKQIYTCCRDLVRRYQLSDI |
| 6267 | 3 | 622 | LGMKKNNSAKRGPQDGNQPPAPPEKVGWVRKFCRGKIFREIWK NRYVVLKGDQLYISEKEVKDEKNIEQVFDLSDEKCELRKSKS RSKINHSKFTLAHSKQPGNTAPNLI FLAVSPEEKESWINALNSA ITRAKNRILDEVTEEDSYLAHPTDRAKIOHSRRPPTRGHLMMA VASTSTSDGMLTDLIQEEDPSPEEPTSLC |
| 6268 | 160 | 1368 | HRELQNLPAGLSSALIDNPLTLLSIDTYVVMLEQEPVTFQDVAU DPSREEWGLLGPTQRTYRDVMLETFGHLVSVGWETTLENKELA PNSDIPEEPAPSLKVQESSRDCALSSSTLEDTLQGGVQEVQDTV LKQMESAQBKDLQKKHFDNRESQANSALDTNQVSLQKIDNPE SQANSALDTNQVLLHKIPPRKRLRKRDSQVKSMMKHSRVKIHQ KSCERQKAKEGNGCRKTFSRSTKQITFIRIHKGSQVCRCECGK IFRNPRIYFSVHKIHTGERPYVCQDCGKGFVQSSSLTQHQRVHS GERPFECQECGRTFNDRSAISOHLRTHTGAKPYKCQDCGKAFRQ SSHILRHQRTHTGERPYACNKGKAFQTQSSHLIGHQRTHNRTKR KKKQPTS |
| 6269 | 2886 | 1449 | HASAPTRRNMAAASPLRDCHAWKDARLPLSTTSNEACKLFDATL TQYVKWTNDKSLGGIEGCLSKLKAADPTFVMGHAMATGLVLIGT GSSVKLDKELDLAVKTMVEISRTQPLTRRELHVS AVETFANGN FPKACELWEQILQDHPTDMLALKFSDAYFYLYGYEQEMRDSVAR IYFFWTPDIPLSSYVKGIYSFGLMETNFYDQAEKLAKALSINP TDAWSVHTVAHIHEMKAEIKDGLFEMQHSETLWKDSMDLACHNY WWHALYLIKEGEYEAALTIYDTHILPSLQANDAMLDVVDSCSML YRLQMEGVSVGQRWQDVLVPARKHSRDHILLEFNDHFLMASLGA HDPQTTOELLTLRDAESPGENCQHLLARDVGLPLCQALVEAE |

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|------------|--|--|--|
| | | | DGNPDRVLELLLPYRIVQLGGSNAQRDVFNQLLIHAALNCTS SVHKNVARSLLMERDALKFNSPLTERLIRKAATVHLMQ |
| 6270 | 23 | 2086 | SVTVTLGSEGDGRPPTVHLEEMEQQEPQNGEPAETKITREAYKKA FLVFNKGLNTDELQKKEAKNYKQIGIGILLRGISISSKESEHT GPGWESARQMCKMKETLQNVTRLEILEKGLATSLONDLQEVF KLYPEFPKDMCEKLEPQSFSSAPQHAENVNGNTSTPSAGAVAA PASLSLPSQSCPAEAPPAYTPQAAEGHYTVSYGTDSGEFSSVGE EFRNHSQPPPLETLGLDADELILIPNGVQIFVNPAGEVSAPS YPGYLRIVRFLDNLDTVLNRPFGFLQVCDNLYPLVPDRSPVLK CTAGAYMFPDTMLQAGCFVGVVLSSELPEDDRELFDLLRQMS DLRLQANWNRABEENEFQIPGRTRPSSDQLKEASGTDVKQLDQG NKDVRHKGKRGKRAKDTSSSEEVNLSHIVCEPVPEEKPELPEW SEKVAHNILSGASVWSWGLVKGAETGKAIQKGA SKLRERIQPE EKPVEVSPAVTKGLYIAKQATGGAQKVSQFLVDGVCVTANCVGK ELAPHVKHGSKLVPESLKKDKGKSLDGMVVAASSVQGFST VWQGLECAAKCIVNNVSAETVQTVRYKYGYNAGEATHHVD SAV NVGVTAYNINNIGIKAMVKKTATQTGHTLLEDYQIVDNSQRENQ EGAANVNVVRGEKDEQTEKVEKRAKKDK |
| 6271 | 32 | 1058 | GCGVKTAGMVGREKELSIHFVFGSCLRVEEVNIPNRRVLVTGA TGLLGRAVHKEFQNNWHAVGCGFRRARPKFEQVNLDSNAVHH I IHDQPHVIVHCAERRPDVVENQPDAAQNLVDASGNLAKA AAVGAFLIYISSDYVFDGNTNPPYREEDIAPLNLYGKTKLDGEK AVLENNLGAVALRIPILYGEVEKLEESAVTVMFQVFSNKSAN MDHWQQRFPFTHVKDVATVCRQLAEKRLDPSIKGTFHWSGNEQM TKYEMACAIADAFNLPSSHLRPTDSEVLGAQRPRNAQLDCSKL ETLGIQORTPFRIGIKESLWFLIDKRWRTQVPH |
| 6272 | 1136 | 528 | GAVMEDAAPGRTEGVLERQGAAPAGQGGALVELTPTPGGLAL VSPYHTRAGDPLDLVALAEQVQKADDEFIRANATNKLTVIAEQI QHLQEQARKVLEDAHRDANLHHVACNIVKKPGNIYYLYKRESGQ QYFSIISPKEWGTSCPHDFLGAYKLQHDLSWTPTYEDIEKQDAKI SMMDTLLSQSVALPPCTEPNFQGLTH |
| 6273 | 256 | 843 | SCPRVSPECRLGCVMFSLPLNCSPDHRRGSCWGRPDQLKIA SAAWNSKCHPGAGAAARQARTLWYDRPRYVMEFCVEDSTDV HVLIEDHRIVFSCKNADGVELYNEIEFYAKVNSKDSQDKRSSRS ITCFVRKWKKEKVAWPRLTKEIDIKPVWLSVDFDNWRDNEGDEEME LAHVEHYAEVRDNTYCVLPT |
| 6274 | 56 | 1142 | AAAAAAGGAGAGARSLSRFRGCLAGALLGDCVGSFYEAHDT VDLTSVLRHVQSLEPDGTPGSETEALYTTDDTAMARALVQSL LAKEAFDEVDMARPAQYKDPDRGYGAGVTVFVKLLNPKCR DVFEPARAQFNGKSGSYGNGGAMRVAGISLAYSSVQDVQKFARLS AQLTHASSLGYNAILQALAVHLALQGESSESKHFLKQLLGHMED LEGDAQSVLDARELGMEERPYSSRLKKIGELLDAQSVTREEVVS ELGNGIAAFESVPTAIYCFRCMEPDPEIPSAFNSLQRTLIYSI SLGGDDTDIATMAGALAGAYYGMDQVPESWQQSCGEYEETDILA QSLHRVFQKS |
| 6275 | 20 | 565 | SRRGARCLARGSRREPFRPAKTMAMVKTVMVGQQLKNTGSLG GGEDKGDGDKSAAEAQMSREEYEQKQLVEEKMERDAQFTQR KAERATLRSHFRDKYRLPKNETDESQIQMAGGDVELPRELAKMI EEDTEEEEEKASVLGQLASLPGLNLGSLKDKAQATLGDLKQSAE KCHVM |
| 6276 | 797 | 97 | TLLPLPFLPDTEGMILLNTGLEGTVAENPVPIVHTPSGNILTLE SCLQLATHPGHWGIHLQIAEPAALRPSLALLARLSSLLHWP VVVGAKISHGSFVPGHVAGRELLTAVAEVFPVHTVAPGWPEEV LGSGYREQLLTDMLCQLWQPVFSQMQAMLLGHSTAGAIGRL LASSPRATVTVEHNPAAGDYASVRTALLAARAVDRTRVYRLPQ GYHKDLLAHVGRN |

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|------------|--|--|---|
| 6277 | 4600 | 2744 | MAFRTEMGLYYSYFKTIVEAPSEFLNGVMMIMNDKLTETPLVINT LKRFNLYPEVILASWYRIYTKIMDLIGIQTKICWTVTIGEGLSF TESCEGLGDPACFYVAVIFILNGLMMALFFIYGYLTSGLSRLGGL VTVLCTFFNHGECTRVMTWTPPLRESFSYPPFLVLQMLLVTHILRA TKLYRGSIALCISNVFEMLPWQFAQFVLLTQIASLFVAVVVG IDICKLRKIIYIHMSIALCFVLMFGNSMLLTSYASSLVIW ILAMKPHFLKINVSELSLWVIQGCPLFGTVILKYLTSKIIFGIA NDAHIGNLLTSKFYSYKDFDTLLYTCAAEFDFMEKETPLRYTKT LLLPVVLVGFVAIVRKIISDMNGVLAKQQTHVRKHQFDHGLVY HALQLLAYTALGILIMRLKFLTPHMCVMASLTCRQLFGWLF KVHPGAIIVFAILAAMSIQGSANLQTOWNIVGEFSNLQEELEW IKYSTKPDVAFAGAMPTMASVKLSALRPVNNPHYEDAGLRART KIVYSMYSRKAEEVKRELILKVNYYILEESWCVRRSKPGCSM PEIWDVEDPANAGKTPLCNLLVKDSKPHTTTFQNSVYKVLV KE |
| 6278 | 3 | 823 | ILFRLVLLSLVYLLNSVATEERKPAEVLIVEGQYAVVGTVLL IRIILEYCOGVDNIPSVTTDMLTRLSDLLKYFNSRSCQLVLGAG ALQVVLGKTITTKNALSSRCLQLIVHYIPVIRAHFEARLPKQ YSMLRHFHDHITKDYHDHIAEISAKLVAIMDSLFDKLLSKYEVKA PVPSACFRNICQMTKMHEAIFDLLPEEQTQMLFLRINASYKLH LKKQLSHLVINDGGPQNGLVLTADVAFTGNLQALKGLKDLN MAETWEQXR |
| 6279 | 127 | 1687 | GGAMASDGARKQFWKRSNSKLPGSIQHVYGAQHPPFDPLHGT LRSTAKMPTTPVKAARVSTFQEFESNTSDAWDAGEDDDDELAMA AESLNSEVVMETANRVLNRHSQRQGRPTLOEGPGLQKPREAE PPSEFSGDLRLVKSVSEHTSCPAESASDAAPLQRSQSLPHSAT VTLGSTSDPSTLSSALSEREASRLDKFQLLAGPNTDLEELRR LSWSGIPKPVPRMTWKLISGYLPANVDRRPTLQKQKEYFAFI EHYDYSRNDVHQDTYRQIHIDIIPMSPEALILQPKVTEIFER LFIWAIRHPASGYVQGINDLVTPFFVVFICEYIEAEVDTVDVS GVPAEVLNCIEADTYWCMSKLLDGIQDNYTFAQPGIQMKVKMLE ELVSRIDEQVHRHLDQHEVRYLQFAFRWMNNLLREVPLRCTIR LWDTYQSEPDGFSHFHLYVCAFLVRWRKEILEEKDFQELLFL QNLPTAHWDDDEDISLLAEAYRLKFAFADAPNHYKK |
| 6280 | 857 | 2515 | ECCDQKMGSRNSSAGSGSDPSEGLPRRGAGLRSEEEEEDE DVDLAQVLAYLLRRGQVRLVQGGGAANLQFIQALLDSEENDRA WDGRLGDRYNPPVDATPDTRLEFNEIKTQVELATGQLGRLRAA QKHSFPRMLHQREGLCHRGSPSLGEQSRVISHFLPNDLGFTDS YSQKAFCGIYSKDGQIFMSACQDQITRLYDCRYGRFRKFKSIKA RDVGWSVLDVAFTPDGNHFLYSSWSYIHCNIYEGEDTHTALD LRPDERRFAVFSIAVSSDGREVLGGANDGCLYVFDREQNRRTLQ IESHEDDVNAVAFADISSQILFSGGDDAICKVWDRRTMREDDPK PVGALAGHQDGITFIDSKGDARYLISNSKDQTIKLWDIRRFSSR EGMEASRQAATQQNWDYRWQVPPKAWRKLKLPDSSSLMTYRGH GVLHTLIRCRFSPHSTGQQFYSGCSTGKVVVYDLSGHIVKK LTHNKACVRDVSWHFPFEKIVSSWDGNLRLWQYRQAEYFQDDM PSEECASAPAPVQSSTPFSSPO |
| 6281 | 857 | 2515 | ECCDQKMGSRNSSAGSGSDPSEGLPRRGAGLRSEEEEEDE DVDLAQVLAYLLRRGQVRLVQGGGAANLQFIQALLDSEENDRA WDGRLGDRYNPPVDATPDTRLEFNEIKTQVELATGQLGRLRAA QKHSFPRMLHQREGLCHRGSPSLGEQSRVISHFLPNDLGFTDS YSQKAFCGIYSKDGQIFMSACQDQITRLYDCRYGRFRKFKSIKA RDVGWSVLDVAFTPDGNHFLYSSWSYIHCNIYEGEDTHTALD LRPDERRFAVFSIAVSSDGREVLGGANDGCLYVFDREQNRRTLQ IESHEDDVNAVAFADISSQILFSGGDDAICKVWDRRTMREDDPK PVGALAGHQDGITFIDSKGDARYLISNSKDQTIKLWDIRRFSSR |

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|------------|--|--|---|
| | | | EGMEASRQAATQONWYRWQQVPPKAWRKLKLPDSSLMYVRGH GVLHTLIRCRFSPIHSTGQQFIYSGCSTGKVYVYDLSGHIVVK LTNHKACVRDVSWHPPFEKIVSSSWDGNLRLWQYRQAEYFQDDM PESEECASAPAPVPQSSTPFSSSQ |
| 6282 | 125 | 906 | RMAACRALKAVLDLSGTLHIEDAAVPGAQAEALKRLRGASVIR FVNTTTEKSKQDLERLRKLEPDISEDEIFTSLTAARSLERKQ VRPMLLVDDRALPDFKGIQTSDFNAVVMGLAPEHFHYQILNQAF RLLDGAPLIAIHKARYYKRKDGALGPGPFVTALEYATDTKAT VVGKPEKTFLEALRGTCPEEAVMIGDDCRDDVGAQDVGMGL GILVKTGKYRASDEBKINPPPYLTCEFPFAVDHILQHLL |
| 6283 | 140 | 1043 | LSLFGIHMNPFWSMSTSSVRKRSEGEKTLTGVDKTSPPRTAP KKQLPSIPKNALPITKPTSPAPAAQSTNGTHASYGPFYLEYSL AEFTLVVKQLPGVYVQPSYRSALMWFGVIFIRHGLYQDGVFKF TVYIPDNYPDGDCPRLVFDIPVFHPLVDPTSGELDVKRAFAKWR RNHNHIWQVLMYARRVFKIDTASPLNPEAAVLYEKDQLFKSK VDSVKVCTARLFDQPKIEDPYAISFPWNPSVHDEAREKMLTQ KKKPEEQHNKSVHAGLSWVKPGSVQPFSSKEEKTAT |
| 6284 | 1 | 2879 | RSVIPGSTISSRWFGLSRPRFMAHEWDWQREELIGQISDIRV QNLQVERENVQKRTFTTRWINLHLEKCNPPLEVKDLFVDIQDGKI LMALLEVLSGRNLLEYKSSSHRIFRLNNIAKALKFLEDSNVKL VSIDAAEADGNPSLVGLIWNILFFQIKELTGNLSRNSPSSS LAPSGGTDSDSSFPPTPAERSVAISVKDQKAKALLAWVQR KTRKYGAVQDFAGSWRSGLAFLAVIKADPSLVDMQALENST RENLEKAFSIAQDALHIPRLLEPEDIMVDTPEQSIMTYVAQFL ERFPELEAEDIFDSKKEVPUESTFVRIKETPSEQESKVFVLTEN GERTYTVNHETSHPPSKVFCVKPESMKEFRLDGVSSHALSDS STEFMHQIIDQVLQGGPGKTSIDSEPSPESSILSSRKENGSRNS LPIKKTVEFEADTYKDFFCCKNLSLCFEGSPRVAKESLRQDGHV LAVEVAEEKEQKQESSKIPSSSDKVAGDIFLVEGTNNSSSS CNGALESTARHDEESHSLSPGENTVMADSFQIKVNLMTVEALE EGDYFEAIPLKASKFNSDLIDFASTSQAFNKVPSPHETKPDADA EAFENHAEKLGKRSIKSAHKKDSPEPQVKMDKHEPHQDSGEA EGCPSAPEETPVKKPEVHEKAKRKSTRPHYEEGEDDDLDQGVG EELSSSPSSCVSLETLSHSEEGLDKFPSPPLSKVSVIPHDLF YFPHYEVLAAVLEAYVEDPEDLKNEEMDLEPEGYMPDLDSRE EEADGSGSSSSSVPGESLPSASDQVLYLSRGVGTTPASEPAP LAPHEDHQQRETKENDPMDSHQSQSPNLENIANPLEENVTKES ISSKKKEKRKHVDHVESLFLVAPGSVQSSDDLEEDSSDYSIPSR TSHSDSSIYLRHTRHRSSESDHFLSLCSVEERSRSG |
| 6285 | 2157 | 1331 | SCKTENLLEMMWFQGLSFLPSALVIWTSAAFIYSYITAVTLHH IDPALPYISDTGTVAPEKCLFGAMLNIAAVLCIATYVRYKQVH ALSPEENVIIKLNKAGLVGLISCLGLSIVANFQKTLFAAHVS GAVLTFMGSLYMFVQTIISYQMQPKIHGQVFWIRLLVWICG VSALSMITCSSLVHSGNFGTDLEQKLHWNPEDKGYVLHMITTA EWSMSFSFFGFFLYIRDFQKISLRVEANLHGLTYDTPACPIN NERTRLLSRDI |
| 6286 | 1619 | 276 | KAGASCCGSANPYVSVGKSCVLLAMAQLQTRFYTDNKKYAVDDV PFSIPAASEIADLSNI INKLLKDKNEFHKHVERFDLIKQFLRM PLDKHMEMENISSBEVVEIEYVEKYTAPQPEQCMFHDDWISSIK GAEEWILTGSYDKTSRISWLEGKSIMTIVGHTDVVKDVAWVKD SLSCILLASMDQITLLWENWVERNKVKAHCCRGHAGSVDSIA VDGSGTKFCSGSWDKMLKIWSTVPTDEDEMEESTNRPRKKQKT EQLGLTRTPITVLSGHMEAVSSVLWSDAEEICSAWHDHTIRVWD VESGSLKSTLTGNKVFNCSISYPLCKRLASGSDTRHRLWDPRT KDGLSVLSLTSHTGWVTSVKWSPTHEQQLISGSLDNIIVKLWDT RSCKAPLYDLAAHEDKVLVDWDTGLLLSGGADNKLYSYRSP |

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|------------|--|--|--|
| 6287 | 278 | 1482 | TTSHVGA MQFFNFQIGLRSTSGKEKYSQDAGFLGDALQLFLQCLALDEDF APAKLQVQKILCDLLLPENLKEGLKESSWSSLPCTKNRPFDHFS VMEESQSLNEPSPKQSEIPEVTSEPVKGSINRAQSAQSINSTE MPAREDCLEKRSSEPVLSVQSKGVLLKRLSLEQDVIVNEDGR NKLKKQGETPNEVCMFSLAYGDIPEELIDVSDFECSLCMLFFE PVTTCPGHSFCNCLERCLDHAPYCPLCKESLKEYLADRRYCVT QLLEELIVKYLPELSEKRIYDEETAELSHLTKNVPIFVCTMA YPTVPCPLHVFEPYRLMIRRSIQGTQKQFGMCVSDTQNSFADY GCMLQIRNVHFLPDGRSVVDTVGGKRFVLKRGMKDGYCTADIE YLEDV |
| 6288 | 1 | 743 | VTLYPCRGVLGNLLLGASGMASGCKIGPSILNSDLANLGAECLE MLDSGADYLHLDVMDGHFVFNITFGHPVVESLRKQLGQDPFFDM HMMVSKPEQWVKPMAVAGANQYTFHLEATENPGALIKDIRENGM KVGLAIKPGTSVEYLAPWANQIDMALVMTVEPGFGGQKFMEDMM PKVHWLRTQFPPLDIEVDGGVGPDTVHKCAEAGANMIVSGSAIM RSEDPFRSVINLLRNVCSAAQKRSLDR |
| 6289 | 1 | 743 | VTLYPCRGVLGNLLLGASGMASGCKIGPSILNSDLANLGAECLE MLDSGADYLHLDVMDGHFVFNITFGHPVVESLRKQLGQDPFFDM HMMVSKPEQWVKPMAVAGANQYTFHLEATENPGALIKDIRENGM KVGLAIKPGTSVEYLAPWANQIDMALVMTVEPGFGGQKFMEDMM PKVHWLRTQFPPLDIEVDGGVGPDTVHKCAEAGANMIVSGSAIM RSEDPFRSVINLLRNVCSAAQKRSLDR |
| 6290 | 3 | 1856 | TIGRWLLGVYETVAPTALCLPRPRLRRRRRRRRRMRISRYTRKA VPQSLKLGITKHALNHHPPPEKLEBISPTSDSHEKDTSSQSKS DITRESSFTSADTGNLSAFPSTYTGAGISTEGSSDFSWGYGELD QNATEKVQTMFTAIDELLYEQKLSVHTKSQEECQOWTASFPHL RILGRQIITPSEGYRLYFRSPSAVSASYETTLSEQERDSTIFGIR GKKLHFSSSYAHKASSIAKSSSFCSMERDEEDSIIVSEGIIEEY LAFDHDIDIEEGFHGKKSEAAATEKQKLGYPPIAPFYCMKEDVLAY VFDSVWCKVVSCEQLTRSHWEGFASDDESNVAVTRPDSESSCV LSELHPLVLPVPOSKVLYITSNPMSLCQASRHQPVNVDLLVHG MPLQPRNLSLMDKLLDLDKLLMRPGSSTILSTRNWPNAVEFS TSSLSTVQSTRRRNPPFRTLHPITSTSHCAETPRSVEEILRGA RVFVAPDSLSSPSTPLSRNLLPFIGTAEVEHVSTVGPQRQMK PHGDSSRAQSAVVDEPNYQQPQERLLLPDFFRPNTTQSFLLDT QYRRSCAVEYPHQARPGRGSAGPQLHGSTKSQSGGRPVSRTRQG P |
| 6291 | 1732 | 602 | LVAKMASSASARTPAGKRVINQEEELRRLMKEKQRLSTSRKRIES PPAKYNRLGQLSCALCNTPVKSELLWQTHVLGKHREKVAELKG AKBASQSSASSAPQSVKRAKAPDADDQDVKRAKATLVPOVQFST SAWTTNFDKIGKEFIRATPSKPSGLSLLPDYDEEEEEEEEGD GERKRGDASKPLSDAQGKEHSVSSSREVTSVLPNDFFTNPPK APIIPHSGSIEKAEIHEKVVERRENTAEALPEGFFDDPEVDARV RKVDAPKDQMDKEWDEFQKAMRQVNTISEATVAEEDDEEGLDRQ IGEIDEQIECYRRVEKLRNRQDEIKNLKEILTIKELQKKEEN ADSDDEGELQDLLSQDWRVKGALL |
| 6292 | 1835 | 1142 | TCPGAMKMVAPWTRFYNSCCLCHVTRGTILLGVWYLIINAVV LLILLSALADPDQYNFSSSELGGDFEFMDANMCIAIAISLLMI LICAMATYGAYKQRAAWIIPFCYQIFDFALNMLVAITVLIYPN SIQYIRQLPPNFYRDDVMSVNPTCLVLIILLFISIIITFKGY LISCWNCYRYINGRNSDVLVYVTSNDTTVLLPPYDDATVNGA AKEPPPPYVSA |
| 6293 | 2382 | 1035 | FWCTLGTVDVHPIGWCAINSKILVPPRTIHAKFTDWKGYLMKRL VGSRTLPVDFHIKVMESMKYPFRQGMRLVVDKSKQVSRTRMAVV DTVIGGRLLLYEDGSDDDFWCHMMSPLTHPVGWSRRVGHGKIK |

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|------------|--|--|--|
| | | | MSERRSDMAHPTFRKIYCDAPVYLFKKVRAVYTEGGWFEEGMK LEAIDPLNLGNICVATVCKVLLDGYLMICVDGGPSTDGLDWFCY HASSHAIFPATFCQKNDIELTPPKGYEAQTFNWNYLEKTKSKA APSRFLNMDCPNHGFVKGMKLEAVDLMEPRLICVATVKRVVHRL LSIHFDGWDSYDQWVDCSPDIYPVWGCELTGYQLQPPVAAEP ATPLKAKEATKKKKQFGKKRKRIPTKTRPLRQGSKKPLLEDD PQGARKISSEVPVGEIIAIVRVKEEHLVASPKASSPELPVSVE NIKQETDD |
| 6294 | 354 | 1814 | AQLTTRGRTVAGGVRWIPSPFPDLELYSCCLGTRGFPPELSHHC KNVIATASDYDMAEITNIRPSFDVSPVAGLIGASVLVVCVSVT VPVWSCCHQQAEEKHKNNPPYKFHMLKGISTYPTLSNKKKIIK VRRDKDGPREGGRNLLVDAEAGLLSRDKDPRGSPSSGSCIDQ LPIKMDYGEELRSPITSLTPGESKTTSPSSPEEDVMLGSLTFSV DYNFPKKALVVTIQAHLGVMDQDTQGSDDPYIKMTILPDKRHR VKTRVLRKTLDPVDETFYFYIPYSQLQDLVLHFLVLSFDRFS RDDVIGEVMPVLAGVDPSTGKVQLTRDIIKRNIIQKICISRGELQV SLSYQVPAQRMTVVVLKARHLQKMDIAGLSGNFYVKVNVYGRK RIAKKTHVKCTLNPIFNESFIYDIPTDLLDISIEFLVIDFD RTTKNEVVGRLLILGAHSVTASGAHWEVCESPRPVPAKWSLS EY |
| 6295 | 2795 | 617 | VSSALLTGATSGSDAAKSEGASAPLSCTNAVAMDRPDEGPPAK TRRLSSSESQRPDPPIPPPPPPPLRLPLPPPPQRRPRLQETEA QVLADMGRVGLGPALPPPPYVILEEGGIRAYFTLGAECPGWDS TIESGYGEAPPPTESLEALPTFEASGGSLEIDFQVQSSSFGGE GALETCSAVGWAPQRLVDPKSKKEAIIIVEDEDEDERESMRSSR RRRRRRRRKQKVKRESRERNAERMESILQALEDIQLDLAVNI KAGAFRLRLKRFIQMRPFLERRDLIIQHIPGFVWKAFLNHR ISILINRRDEDIFRYLTNLQVQDLRHISMGYKMKLYFQTNPYFT NMVIVKEFQNRNRSRGLVSHSTPIRWHRGQEPQARRHGNQDASHS FFSWFSNHSLEADRFAEIIKNDLWVNPRLYYLRERGSRIKRRK QEMKKRKTGRCEVVIMEDAPDYAVEDI FSEISDIDETIHDIK ISDFMETTDYFETTDNEITDINENICDSENPDPHEVNPNETDN NESADDHETTDNNESADDNNENPEDNNKNTDDNEENPNNNENTY GNNFFKGGFWGSHGNQDSSDSNEADEASDDEDDNDGNEGDN SDDGNEGDNESDDDDRDIEYYEKVIEDFDKQADYEDVIEII SDESVEEIEEGIEGIIQOQDEIYEEGNYEEGESDVEEGEDSDS DLEDVLQVPNGWANPGKRGKTG |
| 6296 | 727 | 1199 | RHCGCDAQGACDSLPTGTSSPVNTARNATPEARCCVWLLDGTTV EAVRPARERLARKELRQKRMQFSDSAYSSNKDSTCLLTERDT LGTSLOFPSPFSGTISFGSFSDSGIFPLGSQCCLGFQQFSISGK KWALIKRVRLSVFGARWGRIYFGK |
| 6297 | 1 | 922 | QRAAASPSGCGRGAEGVGMAMEGYWRFLALIGSALLVGFLS VIFALVWVLYHREGLGWDGSALEFNWHPVLMVTGFFVIQGI VYRLPWTWKCSKLLMKSIHAGLNAVAAILAISVVAVFENHNVN NIANMYSLSHWVGLIIVICYLLQLLSGFSVFLLPWAPLSLRAFL MFIHVYSGIVIFGTVIATALMGLTEKLI FSLRDPAYSTFPPEGV FVNTLGLLILVFGALIFWIVTRPQWRKPKEPNSTILHPNGGTEQ GARGSMPAYSGNNMDKSDSELNNEVAARKRNALDEAGORSTM |
| 6298 | 3 | 985 | SVPLRLSLSGTLQAGTTTKMAVARLAAVAANVPCRSWGAAY PFGPHRGLSVLLARIQPRAPRWLPACRQKTSLSPLNRPDLNLA YKLGKSGPIIFIPGYSYMGTKALAEIEFCKSLGHACIRFD YSGVGSSDGNSEESTLGKWRKDVLSIIDDLADGPQILVGSLLGG WMLHAAIARPEKVVALIGVATAADTLVTKFNQLPVELKKEVEM KGVSMPSKYSEGGVYNVQYSFIKEAEHCHLLHSPIPVNCPIRL LHGMKDDIVPWHTSMQVADRVLSTDVDVILRKHSDHRMREKADI QLLVYTTIDDLIDKLSTIVN |

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|------------|--|--|--|
| 6299 | 512 | 814 | ECDELEGIMPVNTISLSLPTNGSFLQDILVHPCVTSLDSAILTSS SIDAMDCSAFSGPYKFPPTPPLESFNLCFYTSQVPVPPILGFYQ MKEEVQLRNNH |
| 6300 | 121 | 692 | AAPSCWSQRGVPAAGTPSSPRLLVSRRAAPSAGPWGAWRQGAR AQSPFSIPNSSSVPGSQDSVHSSPEDGGGGRDRPVGGSPGGPR LVIGSLPAHLSPHMFGGFKCPVCSKEVSSDEMDDLHVMCLTKPR ITYNEDVLSKDAGECAICLEELQGGDTIARLPCLCIYHKGCI WFEVNRSCPEHPSD |
| 6301 | 616 | 284 | GKFLVPVNWEPFQPLFFPKYLRCYRCLETKELGCLIGSDICLTP AGSSCITLHKNSSGSDVMVSDCRSEKQMSDCSNTRTSPVSGFW IFSQCFLDFCNDPQNRGLYTP |
| 6302 | 490 | 745 | IFGFLHLFHMESFLLVCALEFAHVFFSSSCGSSVALHSDPCLLS PVLLNCLPGDLRLDELAYAKLKYKAISELDHALNDMTSL |
| 6303 | 2 | 1961 | YWNYYGGGLLWQSWQEXHPGQALSSEPWNFPDTEEWQHYSQL YWYLEQFQYWEAQGWTFDASQSCDITDYSKTTEADKNDKCM KVDLVSLSSPIMGDNDSSTSDKHSEILDGINSIKLNSEEV QSQDSCSTSHDGHQQLSEVSSKRECPASGQSEPRNGGTNEESNS SGNTNTDPPAEDSQKSSGANTSKDRPHASGTDGDESEEDPPEHK PSKLKRSHELDIDENPASDFDSDGSLLGPKYSGSQYGGIPNFS HRQVRYLEKNVKLKSKYLDMMRQIKMKKNKHIFFTESEKPFKK SKILSKVEKFLTWVNKPMDEEASQESSHNDNGHDASTSCDSEEQ DMSVKKGDDLLTNNPEPEKCSQSVSSAGELETERYERDSSLATV PDEODCVTQEVPSRQAETAEVKKKKKKKKKKVNLGPPRIAA VPELAKYWAQRYLFSRFDGKILDRGWFSVTPEKLAHIAGR VSQSFKCDVVVDAFCGVGGNTIQFALTGMRVIAIDIDPVKIALA RNNAEVYGIADKIEFICGDFLLASFLKADVVFLSPWPWGGPDYA TAEFTDITMMSPDGFEIFRLSKITNINIVFLPRNADIDQVAS LAGPGGQVEIEQNFLNNKLTITAYFGDLIRRPASET |
| 6304 | 1 | 1438 | HRARVDRSRESPPGDLRHPGRVRRDITLSGHPRLSTQHVVLLRE DEVGDPGTDKLGHPQHGSPIQETQSEVTVLVSPLPGSDMAALPA WRATSGTLTWPHATAEGRDLLGAENRALTGGQQAEDPTLASGAYQ WPGSVEKLQGSVWCDAETLLSSRTGGQAPPWLTDHVQMLRL AQGEVVDKARVPAHQVQLQVGFSTEALQDLSSPRLSQLCSQGL CGLIKRPGDLPEVLSFHVDRVLGLRRSLPAVARRFHSPLPYRY TDGGARFVIWWAPDVQHLSDPDQNSLALGNLQYQALLAHSCN WPGQAPCPGIHTEWARLALFDLLQVHDLDRYCCGFEPSPSD PCVEERLREKCRNPALRLVHILVRSDDPSHLVYIDNAGNLQHP EDKLNFRLLLEGIDGFPESA VKVILASGCLQNM LKSLQMDPVFWE SQGGAQGLKQVLQTLQRCQVLLGHIQKHNLTFRDEDP |
| 6305 | 99 | 420 | NMIWRGRSTYRPRRSVFPPELIGPMLEPGDEEPQEEFPPTES RDPAPGQERBEDQGAETQVPDLEADLQELSQSKTGDECGDGP VQGGKILTKSEQPKMPEGR |
| 6306 | 1 | 1874 | PTSPSKVKVPHFLIHSYTRPTVCQACKLLKGLFRQGLQCKDC KFNCHKRCATRVNDCLGEALINGDVPMEEATDFSEADKSALMD ESEDGVI PGSHSENALHASEEEEGEGGKAQSSLGVI PLMRVVQ SVRHTTRKSSTTLREGVWVHYSNKDTLRKRHYWRDLCKCITLFO NNTTNRYYKEIPLSEILTVEAQNPSLVPPGTNPHCFEIVTANA TYFVGEMPGGTGGPSGQGAEAARGWETAIRQALMFVILQDAPS APGHAPHRQASLSISVNSQIQENVDIATVYQIFPDEVLGSGQF GVVYGGKHKRTGRDVAVKVIDKLRFPPTKQESQLRNEVAILQSLR HPGIVNLECMFETPEKVFVMEKLGDMLEMLSSSEKGRLEPER TKFLITQILVALRHLHFKNI VHCDLKPENVLASADPPQVKLC DFGFARIGEKSPRRSVVGTPAYLAPEVLLNQGYNRSLDMWSVG VIMYVLSLSTFPNEDEDINDQIQNAAFMYPASPWHSISAGAI LINLLQVKMRKRYSDKSLSHPLQEQYTWLDLRELEGKMER YITHESDDARWEQFAAEHPLPGSGLPTDRDLGGACPPQDHDMMQ |

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|------------|--|--|--|
| 6307 | 2136 | 589 | LAERISVL CFLPRGRDPEPPEAGAAAPCAPGAPDMSFRKVVRSKFRHVFG QPVKNDQCYEDIRVSRVTWDSDFCAVNPKFLAVIVEASGGGAFL VLPLSKTGRIDKAYPTVCGHTGPVLDIDWCPHNDEVIASGSEDC TVMVWQIPENGLTSPLTEPVVVLEGHTKRVGI IAWHPTARNVL SAGCDNVVLWNVGTABELYRLDSLHPDLIYNVSWNHNGSLFCS ACKDKSVRIIDPRRGTVAEREKAHEGARPMAIFLADGKVFTT GFSRMSERQALALNDPENLEEPALQELDSSNGALLPFYDPDTSV VYVCGKGDSSIRYFEITEEPYIHFNTFTSKPEQRMGMSMPKR GLEVSKCEIARFYKLHERKCEPIVMTVPRKSDLFQDDLYPD TAG PEAALEAEWVSGRDADPILISLREAYVPSKQRD LKISRRNVLS DSRPAMAPGSSHLGAPASTTTAADATPSGSLARAGEAGKLEEV QELRALRALVKEQGDRI CRLEEQLGRMENGDA |
| 6308 | 2 | 1118 | GRPTRPEKMLLSLVLHTYSMRVLLPSVVLLGTAPTYYVLAWGVWR LLSAFLPARFYQALDDRLYCVYQSMVLFFFENYTGVOILLYGLD PKNKENI IYLANHQSTVDWI VADILAIQNALGHVRYVLKEGLK WLPYLGWYFAQHGGIYVKRSKAFNEKEMRNKLQSYVDAGTPMYL VIFPEGTRYNPEQTKVLSASQAFAAQRGLAVLKHVLTPIKATH VAPDCMKNYLDAIYDVTVVYEGKDDGGQRRSPMTTEFLCKECP KIHIIHIDRIDKDVPEEQEHMRRLHERFEIKDKMLIEFYESP PERKRPFGKSVNSKLSIKKTLPSMLILSGLTAGMLMTDAGRKL YVNTWIYGTLLGCLVVTIKA |
| 6309 | 220 | 563 | LVAEVKEPCSLPMLSVDMENKENGSGVGVKNSMENGRRPPDPADWA VMDVNNYFRTVGFEEQASAFQEQEIDGKSLLLMTRNDVLTGLQL KLGPALKIYEHVVKPLQTKHLKNSS |
| 6310 | 36 | 979 | GPRCWFLLILSSVNCETLRIGKAWPQSSGQERYWTPRTHSSASE AQRGSLAELNVAAGLWADCDQPLYDCPMGLICTNYHILQEHV DLHLEENSFQQGMDRVQCSGDLQLAHQEQBEDRKRRESESRQE IEEFQKLQRQYGLDNSSGGYKQQQLRNMEIEVNRGRMPPSEFHR KADMMESLALGFDDGKTKTSGIIEALHRYQNAATDVRRVWLSS VVDHFPSSLGDKGWGCGYRNFQMLLSSLLQNDAYNDCLKGMILIP CIPKIQSMIEDAWKEGFDPPQASQLIIRLQGTAWIGACEVYIL LTSLRV |
| 6311 | 1 | 675 | PVWNNSCEGPRLAAARTGHGVGRRARLACLGEPRVKAAMVMTL ASKLRDDGLKGSRTAATASDSTRRVSVRDKLLVKEVAELEANL PCTCKVHFDPENKLHCFQLTVPDEGYQGGKFQFETEVDPAYN MVPPVKCLTKIWHPNITETGEICLSLLREHSIDGTGWAPTRTL KDVVWGLNSLFTDLLNFDDPLNIEAAEHHLRDKEDFRNKVDDYI KRYAR |
| 6312 | 213 | 1400 | GDELVKREAGMKMLPGVGVFGTGSSARVLVPLLRABGFTVEALW GKTEEEAKQLAEEMNIAFYTSRTDDILLHQVDVLCISIPPLT RQISVKALGIGKNNVCEKAATSVDAFRMVTASRYYPQLMSLVGN VLRFLPAFVRMKQLISEHYVGAVMICDARIYSGLLSPSYGWIC DELMGGGGLHTMGTYIVDLLTHLTGRRAEKVHGLLKTFRQNAA IRGIRHVTSDDFCFQMLMGGGVCSTVTLLNFNMPGAFVHEVMUV GSAGRLVARGADLYGQKNSATQEELLRLDSLAVGAGLPEQGPQD VPLLVLKGMVYMQALRQSFQGGQDRRTWDRTPVSMASFEEDGL YMQSVVDAIKRSSRSGEWEAVEVLTEEPDNTQNLCEALQRNNL |
| 6313 | 2 | 2071 | QRSGAARLAFLPSEFSPACVHRSPLSFHGCWFYFVVFVFMPLGVL FHRRAHGCTLSCSSFVEQPTAMEAEETMECLQEFPEHHKMILD RLNEQREQDRFTDITLIVDGHFKAHKAVALAACSKFFYKFFQEF TOEPLVEIBGVSKMAFRHLIEFTYTAKLMIQGESEANDVWKAEE FLQMLEAIKALEVRNKENSAPLEENTTGKNEAKKRKIAETSNVI TESLPSAESEPEVEIEIAEGTIEVEDEGIEITLIEVASAKQSVK YIQSTGSSDDALALLADITSKYRQGDRCQIKEDGCPSPDPTSK QVEGIEI VELQLSHVKDLFHCCKNRSFKLFYHFKEHMKSHSTE |

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|------------|--|--|--|
| | | | SFKCEICNKRYLRESAWKQHLNLCYHLEGGVSKKQRTGKKIHVC QYCEKQFDHFGHFKEHLRKHTGEKPFECPNCHERFARNSTLKCH LTACQTGVGAKKGRKKLYECQVCNSVFNWDQFKDHLVIHTGDK PNHCTLCDLWFMQGNELRRHLSDAHNISERLVTVEVLSVETRVO TEPVTSMITIEQVGKVHVLPLLQVQVDSAQVTVEQVHPDLLQDS QVHDSHMSSELPEQVQVSYLEVGRITQTEEGTEVHVVEELHVERVNO MEVEVQTELEADLDHVTPEIMNQEERESSQADAAEAAREDHED AEDLETKPTVDSEAEKAENEDRTALPVL |
| 6314 | 2 | 2071 | QRSGAARLAFPLSPFSPACVHRSPLSFHCWFFVVFVFMPLGLV FHRRAHAGCTLSCSSFVEQPTAMEAETMECLQEFPEHKKMILD RLNEQREQDRFTDITLIVDGHFKAHKAVALAACSKFFYKFFQEF TQEPVLEIEGVSKMAFRHLIEFTYAKLMIQGEEDANDVWKAEE FLQMLEAIKALEVRNKENAPLEENTTGKNEAKKRKIAETSNVI TESLPSAESEPVIEVEIAEGTIEVEDEGIEETLEEVASAKQSVK YIQTSSDDSDALALLADITSKYRQDRKGQIKEDGCPSPDPTSK QVEGIEIIVELQLSHVKDLFHCCKNRSFKLFYHFKHEMKSHSTE SFKCEICNKRYLRESAWKQHLNLCYHLEGGVSKKQRTGKKIHVC QYCEKQFDHFGHFKEHLRKHTGEKPFECPNCHERFARNSTLKCH LTACQTGVGAKKGRKKLYECQVCNSVFNWDQFKDHLVIHTGDK PNHCTLCDLWFMQGNELRRHLSDAHNISERLVTVEVLSVETRVO TEPVTSMITIEQVGKVHVLPLLQVQVDSAQVTVEQVHPDLLQDS QVHDSHMSSELPEQVQVSYLEVGRITQTEEGTEVHVVEELHVERVNO MPVEVQTELEADLDHVTPEIMNQEERESSQADAAEAAREDHED AEDLETKPTVDSEAEKAENEDRTALPVL |
| 6315 | 1 | 1015 | LGLAVNVVTTLVLSYCPATEEAPYWTYLLCALGLFIYQSLDA IDGQARRTNSCSPGLGELFDHGCDSLSTVFMVAGASIAARLGT PDWFFSCSFIGMFVYCAHWQTYVSGMLRFGKVDVTEIQIALVI VFLSAFGGATMWDYTIPILEIKLILPVLGFLGGVIFSCSNYF HVILHGGVGKNGSTIAGTSVLSPLHIGLIIILAIMIYKKSATD VFEKHPCLYILMFGCVFAKVSQKLVAHMTKSELYLQDITVFLGP GLLELDQYFNNFIDEYVVLWMAVISSFDMVIYFSALECLQISRH LHLNIFKTACHQAPEQVQVLSKSKSHQNNMD |
| 6316 | 1503 | 792 | VSAGAGTGIMGGTTSTTRVTFEADENENTTVVKGIRLSENVDR MKESSPSGSKSQRYSGAYGASVSDEELKRRVAEELALEQAKKES EDQKRLKQAKELDRERAAANEQLTRAILRERICSEERAKAKHL ARQLEEKDRVLKKQDAFYKEQLARLEERSSEFYRVTTQYQKAA EEVEAKFKRYESHPCADLQAKILQCYRENTHTLKC SALATQY MHCNVHAKQSMLEKGG |
| 6317 | 102 | 839 | PEAQTSAVLAREKGHLPTMRHEAPMQMASAQDARYGQKQSSDQ FDYMFKLLTIGNSSVGKTSFLFRYADDSFTSAFVSTVGIDFKVK TVFKNEKRIKLQIWDTAGQERYRTITTAYRGAMGFILMYDITN EESFNAVQDWSQIKTYSWDNAQVILVGNKCDMEDERVISTERG QHLGEQLGFEFFETSAKDNINVKQTFERLVDIICDKNSSESLETD PAITAAKQNTRLKETPPPPQPNAC |
| 6318 | 1765 | 733 | PWHPLRTLPLHHPHPRPPRAEGREGADSMHLPGLERREAPPL LGPILLSPPFLPAGSWHRQMLRSSLRFPITNSAGAPCKAAGRMNI LAPVRRDRVLAELPQCLRKEAALHGHKDFHPRVTCACQEHRTGT VGFKISKVIVGDLVSGKTCCLINRFCKDTFDKNYKATIGVDFEM ERFEVLGIPFSLQLWDTAGQERFKCIASYYRGAQAIIVFNLN DVASLEHTKQWLADALKENDPSSVLLFLVSGSKDLSTPAQYALM EKDALQVAQEMKAQYVAVSSLTGENVREFFRVAALTFEANVLA ELEKSGARRIGDVVRINSDDSNLYLTASKKKPTCCP |
| 6319 | 88 | 717 | AATMRLNQNTLLLGKKVVLVPYTSEHVPSRYHEWMKSEELQRLT ASEPLTLEQYAMQCSWQEDADKCTFIVLDAEKWQAQPGATEES CMVGVDNLFLLDLEDTLGEIEVMIAEPSCRGKGLGTEAVLAML SYGVTTLGLTKFEAKIGQGNEPSIRMFQKLHFEQVATSSVFEV |

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|------------|--|--|---|
| 6320 | 90 | 1111 | TLRLTVSESEHQWLEQTSHVEEKPYRDGSAEPC RPRTGREKVAMAAVDSFYLLYREIARSCNCEALALVGAWYTA RKSITVICDFVSLIRLHFIPRLGSRADLIKQYGRWAVVSGATDG IGKAYABELASRGLNIIILSRNEEKLQVAKDIADTYKVTETDII VADFSSGREIYLPPIREALKDKDVGILVNNVGVFPYVQYFTQLS BDKLWDIINVNIAAASLMVHVLPGMVERKKGAIVTISGSCCK PTPQLAASFASKAYLDHFSRALQYEQYASKGIFVQSLIPFVAVTS MTAPSNFLHRCRWLVSPKPYAHAVSTLGISKRTTGYWSHSIQ FLFAQYMPPEWLWVGANILNRSRLKEALSCTA |
| 6321 | 1418 | 341 | HRKAALGALMAGRLGKALAAVSLSLALASVTRSSRCRGIQAF RNSFSSSWFHLNNTVMMSGNGSKNSHNKARTSPYPSKVERSQ VPEKVGWLVWQDYKPEYTAVSVLGPRWADPQISESNFSPK FNEKDGHVVERKSKNGLYEINGRPRNPAGRTGLVGRGLLGRWGP NHAADPIITRWKRDSSGNKIMHPVSGKHILQFVAIKRKDCGEWA IPGGMVDPGEKISATLKREFGEALNSLOKTSAEKREIEKLHK LFSQDHLVIYKGYVDDPRNTDNAMMETEAVNYHDETGEMDNLM LEAGDDAGVKWVDINDKLKLYASHSQFIKLVAEKRDHWSSEDS EADCHAL |
| 6322 | 2047 | 1083 | NQELKNVSSRTVQPHFLEFLSLGWSVDVGRHPGWTGHVSTS WSINCCDDGEGSQQEEVISEDIGASIFNGQKKVLYYADALTEI AFVVPSPVESLTDLSLENSISDQSDSNMMDLMPGILKQPSLTLEL FPNHTDNLNSSLSPSSRMRLPQGRFPVPLGPETRVSVVWVE RYDDIENFPLSELMTEISTGVETTANSSTSLRSTTLEKEVPVIF IHPLNTGLPRIKIQGATGKFNMVIPLVDMIVSRALGFLVRQT VINICRRKRLSDSYSPPHVRKQKITDIVNKYRNKQLEPEFYT SLFQEVGLKNCS |
| 6323 | 1 | 656 | PASTTDGAQEARVPLDGAFWIPRPPAGSPKGCACVSKPPALQA PAAPAEPSASPPMAPTLFPMESSKSKTDSVRAAGAPPACKHLA EKKTMNTNPTTVIEVYPTTEVNDYYLWSIFNFVYLNFCCLGFIA LAYSLLKVRDKLLNDLNGAVEDAKTDRLINITRSGLAASCIMLW MALSVIATHRGLRSSASTLVAEPHDWINTERPQVTFRERCPAL |
| 6324 | 1 | 2061 | EGACMRRCPCRGSLNEAEAGALPAAARMGLEAPRGGRRRQPGQQ RPGPGAGAPAGRPEGGGPWARTEGSSSLHSEPERAGLGPAGTES PQAEFWTDGQTEPAAAGLVETERPKQKTEPDRSSLRTHLEWSW SELGTTCLWTETGTDGLWTDPHRSDLQFQPEEASPTQFGVHGP WTELETHGSQLQPERVKSADNLWTHQNSSSLQTHPEGACPSKE PSADGSKELYTDGSRTOQDIEGPWTEPYTDGSKKQDTEAARK QPGTGGFQIQDQDTSWTQPSDGSQTAPGTDCLLGEPEDEGPLE EPEPGELLTHLYSHLKCSPLCPVRLIITPETPEPEAQPVGPPS RVEGGSGGFSSASSFDESEDVAVAGGGGASDPDRSGSKPWKKL KTVLKYSFPFVVSFRKHYPWVQLSGHAGNFQAGEDGRILKRFQC EQRSLEQLMKDPLRPFPVAYYGMVLQDQGTFFNQMEDLLADFE SIMDCKMGSRTYLEBELVKARERPRPKDMYEMVAVDPGAPT EEHAQGAVTKPRYMQWRETMSSSTLGFRIEIGIKKADGTCNIN KKTQALEQVTKVLEDFVDGHVILQKYVACLEELREALEISPPF KTHEVVGSSLLFVHDHTGLAKVWMIDFGKTVALPDHQTLSHRLP NAEGNREDGYLWGLDNMICLLQGLAQS |
| 6325 | 165 | 944 | GLRDPFRKRRLKPKQVMSNYVNDMWPGSPQEKDPSSTSRSGGS SRLSSRSRSHSRSSSRSHSRVSSSRFSSRSRSHSRSSRRHQ RKYRRYSRSYSRSHSRSSSRSHSRRYRERYGFTTRYRSPSRYSRS RSRSHSRGRSYCGRAYAIARGORYYGFGRTVYPESHRRWRDRSR TRSRSRTPFRLSEKDRMELLEIAKTNAAKALGTTNIDLPAISLRT VPSAKETSRGIGVSSNGAKPEVSIILGLEQNFQKANCQI |
| 6326 | 238 | 680 | GEPSPATQPKSATGAGVLHQHFSSGHYVLMGLLPPPTISFT VQTTLOPPGGLPAAPVSGRMAFEPVGRDLARRMVPRAKRTQTL GARRVAAQGARPLPEDRRPKSGERLHVTVAPCWEFVLPVSULTA |

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|------------|--|--|--|
| 6327 | 1 | 1337 | QAWGGVGQEAASSGVP SLARLAPAGGSVVMPTQQPAAPSTRAPKPSRSLSGSLCALFSDA DSGSGMKAELPPGPGAVGREMTKEEKLQLRKEKKQKKRKEEK GAEPETGSAVSAACQCGPTRELPESGIQLGTPREKVPAGRSKAE LRAERRAKQEAERALKQARKGEQGGPPPKASPTAGETPSGVKR LPEYPQVDDLLRLRLVKKPERQQVPTRKDYGSKVSLFSLPQYS RQNSLTQFMSIPSSVIHPAMVRLGLQYSQGLVRGNSNARCIALLR ALQQVIQDYTTTPNEELSRDLVNKLKPYMSFLTQCRPLSASMHN AIKFLNKEITSVGSSKREEEKSELRAAIDRYVQEKIVLAAQAI SRFAYQKISNGDVILVYGCSSLVSRILQEAWTBGRFRFRVVVDS RPWLEGRHTRSLVHAGVPASYLLIPAASYVLPEVSTEEDKSKV GGEKV |
| 6328 | 1030 | 276 | HASAEVTTAAARGLGAMEEEMHTDAKIRAENGTGSSPRGPGCSL RHFACEQNLLSRPDGSASFLOGDTSVLGAVGYGPAEVKVSKEIFN KATLEVILRPKIGLPGVAEKSRERLIRNTCEAVVLGTLHPRTSI TVVLQVVDAGSLLACCLNAACMALVDAGVPMRALFCGVACALD SDGTLVLDPSTSKQEKARAVLTFALDSVERKLLMSSTKGLYSDT ELQCCLAQAASQHVFRFYRESLQRRYSKS |
| 6329 | 3 | 2016 | SSEVAAGGGTRSAMAEGSGEVVTVSATGAANGLNNGAGGTSATT SNPLSRKLHKILETRLDNDKEMLEALKALSTFFVNSLRTRNL RGDIERKSLAINEEFVSIKFEVKEELESISEDVQAMSNCCQDMT SRLQAAKEQTQDLIVKTTKLQSESQKLEIRAOVADAPLSKQFLT SDEMILLRGTRREGPITEDFFKALGRVKQIHNDVKVLLRTNQTA GLEIMEQMALLOETAYERLYRWQSECRILTQESCDVSPVLTOA MEALQDRPVLKYKTLDEFGTARRSTVVRGFDALTRGGPGGTPR PIEMHSHDPLRYVGDMLAWLHQATASEKEHLEALKHVTTQGV ENIQEVVGHITGVCRPLKVRIEQVIVAEPAVLKYKISNLLKF YHHTISGIVGNSATALLTIEEMHLLSKKIFFNSLSLHASKLMD KVELPPDLPSSALNQTIMLLREVLASHDSSVPLDARQADFV QVLSCVLDPLLMQCTVSASNLGTADMATFMVNSLYMMKTTLALF EFTDRRLEMLQFQIEAHLDTLINEQASYVLTTRVGLSYIYNTVQQ HKPEQGS LANMPNLDVTLKAAMVQFDRLSAPDNLLIPQLNFI LSATVKEQIVKQSTELVCRAVEGYAAVMNP INEYKDPENILHR SPQQVQTLLS |
| 6330 | 1151 | 333 | FFYTYFYENKTFSRKMVAEKETLSLNKCPDKMPKRTKLLAQQPL PVHQPHSLVSEGFIVKAMMKNSVVRGPPAAGAFKERPTKPTAFR KPYERGDFFIALEHDSKGNKIAWKVEIEKLDYHHYLPFFDGLC EMTFPYEFFARQGIHDMLEHGGNKILPVLPLQIIPKINALNLRN RQVICVTLKVQLHLVSAEMVGKALVPYRQILPVLNIFKNMNV NSGDGIDYSQQKRENIQDLIQUETLEAFERYGGENAFINIKYVVP TYESCLIN |
| 6331 | 3 | 495 | QQQQRVTRGRRRACASATFLEGCVDSLSPRTHAALLKVAQMVT LIAFICVRSSSLWNTNYSAYSFEVVTICDLIMILAFYLVHLFRFY RVLTICISWPLSELLHYLIGTLLLLIASIVAASKSYNQSGLVAGA IFGFMATFLCMASIWLSYKISCVTQSTDAV |
| 6332 | 1 | 878 | VTESNKFDLVSPFIPLLRERIYSNNQYARQFIISWILVLESVPDI NLLDYLPDILDLGLFQILGDNGKEIRKMCVVVLGEFLKEIKKNPS SVKFAEMANILVIHCQTDDLIQLTAMCWMREFIQLAGRVMLPY SSGILTAVLPCLAYDDRKKS IKEVANVCNQSLMKLVTEPDELD ELRPGQRCAPTPDDALPKQEGTAGSEWTPSLHLTSCRGPREPD VIGVALGPHLSNQDYFMYVTHITVAATQSRSGSGSPFFCRQDTG KLSTMATHSOLVKTGTGLEPRQAVSSSH |
| 6333 | 3 | 1467 | TRTPSEAEAGGESPOSCVSAHSDWTAGKPVSLAPLIPPRSAG QPLTFPSGRQPLRSLLVGMCSGSGRRSSLSPTMRPGTGAERG GLMMGHFPGMHYAFPMGMHPMQQRANMPPVPHGMMPQMPPMGPP MGQMPGMSSVMPGMMMSHMSQASMQPALPPGVNSMDVAAGTAS |

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|------------|--|--|--|
| | | | GAKSMWTEHKSPDGRITYYNTETKQSTWEKPDLLKTPAEQLLSK CPWKEYKSDSGKPYYYNSQTKESRWAKPKELEDLEGYQNTIVAG SLITXSNLHAMIKAEESKQEECTTTSTAPVPTTEIPTTMTMA AAEAAAAVVAAAAAANASTSASNTVSGTVPVVPEP EVTISIVATVDNENTVTISTEEQAQLTSTPAIQDQSVESVSSNTG BETSKQETVADFTPKKEEESQPAKTTYTWNTKEEAKQAFKELL KEKRVPSNASWEQAMKMI INDPYRSALAKLSEKKQAFNAYKVQT EKK |
| 6334 | 17 | 644 | GGNPSGRAAGFAAAAMPSSPLRVAVVCSSNQNRSMEAHNILSKR GFSVRSFGTGHVKLPAPADKPNVYDFKTTYDQMYNDLLRKDK ELYTQNGIILHMLDRNKRIKPRPERFQNCCKDLFDLILTCERVYD QVVEDLNSREQETCQPVHVNVVDIQNHEBATLGAFILICELCQC IQHTEDMENEIDELLQEFEEKSGRTTFLHTVCFY |
| 6335 | 82 | 529 | AARARPGVLCCLLGAALGDQSRVMSYIPGQPVTAVVQVREIH KLQGENLILGFSIGGGIDQDPSQNFSEDKTDKGIYVTRVSEG GPAEILAGLQIGDKIMQVNGWDMTMVTHDQARKRLTKRSEEVRL LVTRQSLQKAVQQSMLS |
| 6336 | 1003 | 438 | HEPASKGRAEVGNMRLSVAAAIISHGRVFRMRGLGPESRIHLLRN LLTGLVRRHERIEAPWARVDEMRGYAEKLIDYGLGDTNERAMRM ADFWLTKDLIPKLQVLAPRYKDTGGYTRMLQIPNRS�DRRAK MAVIEYKGNCLPFLPFRDSSLTLLNQLLQGLRQDLRQSQSEAS NHSSHTAQTPGI |
| 6337 | 76 | 524 | EGIQMLSVPQDTPKPKGCAGCNRKIKDRYLLKALDKYWHEDCLKC ACCDRLGEVGSSTLYTKANLILCRRDYLRFGVTGNCAACSKLI PAFEMVMRAKDNVYHLDCFACQLCNRQFCVGDKFFLKNNMILCQ TDYBEGLMKEGYAPQVR |
| 6338 | 66 | 1349 | APNSESQTQGLPTPANLFWTRRANPDPTTMSATDRMGPKAVF GLRLALLLLGLGTPKSGVQGEGLDFPEYDGVDRVINVNAXNY KNVFKKYEVLALLYHEPPEDDKASQRFEMEELILELAAQVLED KGVGFGVLVDSEKDAAVAKKLGLTEVDSMYVFKGDEVIEYDGEFS ADTIVEFLLDVLEDPVELIEGERELQAFENIEDEIKLIGYFKSK DSEHYKAFEDAAERFHPYIPFFATFDSKGAKLTLKLEIDFYE AFMEEPVTIPDKPNSSEETVNFVEEHRSTLRKLKPESMYETWE DDMDGIHIVAFEEADPDGFLETLKAVAQDNTENPDLSIWI DPDDFPLLVPYWEKTFDIDLSAFQIGVNVNTDADRLWMEMDDEE DLPSAELEDWLEDVLEGEINTEDDDDDDDDD |
| 6339 | 246 | 1813 | NRCDRGGGGQAEQAGQGCRTQAGPGFGFGHSFFSQGAMKAFH TFCVLLVFGSVSEAKFDDFEDEEDIVEYDNDFAEFEDVMEDS VTESQPRVITTEDEDETTVELEGQDENQEGDFEDADTQEGDTE SEPYDDEEFEGYEDKPDTSSSKNKDPITIVDPAHLQNSWESYY LETLMVTGLLAYIMNYITGKNKNSRLAQAWFNTHRELLESNFTL VGDDGTNKEATSTGKLNQENEHIYNLWCSGRVCCBGMLIQRLFL KRQDLLNVLARMMPVSDQVQIKVTMNDDEMDTYVFAVGTRKAL VRLQKEMQDLSEFCSDKPKSGAKYGLPDSLAILSEMGVTDGMM DTKMVHFLTHYADKIESVHFSQDQFSGPKIMQEEGQPLKLPDTR TLLLTFFNVPGSGNTYPKOMEALLPLMNMVYISIDKAKKFRNLRE GKQKADKNRARBENFLKLTHTVQRQEAQSRREEKKRAEKERIM NEEDPEKQRRLEEAALRREQKLEKKQMKKQIKVKAM |
| 6340 | 2 | 583 | EACAHTLSCPAFARLGRARRRPWMSHRTSSTFRASRFSHSSSSS SSSSTSSSASRALPAQDPPEKALSMFSDDFGSFMRPHSEPLAF PARPGGAGNIKTLDAYEFAVDVDFSPEDIIVTTSSNNHIEVRA EKLAADGTVMNNFAHKCQLPEDVDPTSVTSALREDGSLTIRARR HPHTEHVQQTFRTEIKI |
| 6341 | 2 | 645 | KMAVLSAPGLRGFRILGLRSSVGPVQARGVHQSVATDGPSSSTQ PALPKARAVAPKPSRGEYVVAKLDDLVNWARSSSLWPMTFGLA CCAEMMHMAAPRYMDRFGVVFRAFRQSDVMIVAGTLTNKMA |

489

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|------------|--|--|---|
| | | | VILKWKFAFLPPSGSITTEDLGNFIRSEFEVVRQLPPASSVST LVLAAPRPKPRQLTPVDKKVSFVDIMPHQSDVSQEGSVDEVKEN TEKMQQGGKDDVSLSEGQLAEQSLASSEDETEITEDLEPEVEED MSASDSDDCIIPGPISKNIKQPSKIRIETIALSLNDSQVTMD TQRLFFVECRFYSLPAEETPVSLPKPKSGQWVYVYNSNVIYVDD ENNAKARDILKAILKQKQEMPNRSLRFTTVSDPPDEQDLECEDI GVAHVDLADMFOEGRDLIBQNIIDVFDARADGEGIGKLRVTVEAL HALQSVYKQYRDDLEA |
| 6346 | 2921 | 533 | QDRRLRLRLQKTCQPTSTMSGSHTPACGPFSAITPSIWPQETL AKYTQKEESAEPFYDEFGRVYKEEGDEPGSSLLANSPLME DAPQRLRWQAHLFTTHNDVGDLTWDKIAVSLPRSEKLRSLVLA GIPHGMRPQLWMRLSGALQKKRNSLSYREIVKNSNDETIAAK QIEKDLRTMPSNACFASMGSGIVPRLRRVLRALAWLYPEIGYC QGTGMVAACLLLFLEEDAFWMMSAI IEDLLPASYPSTTLTGVO TDQVLRHLIVQYLPRLDKLLQEHDI ELSLITLHWFLTAFASV DIXLLRLRIWDLFFYEGSRVLFQTLTGLMLHLKEELIQSENSASI FNTLSDI PSQMEDAELLGVMRLAGSLTDVAVETQRRKHLAYL IADQGQLLGAGTLTNLSQVVRRTQRRKSTITALLFGEDDLEAL KAKNIKQTELVDLREAILRVARHFQCTDPKNCVSVSRQLPGLL PNTALTPTPLVGLYSLWQELTPDYSMESHQRDHENYVACSRSH RRAKALLDFERHDDDELGFRKNDIITIVSQKDEHCWVGELNGL RGWFFPAKFVEVLDERSEKEYS IAGDDSVTEGVTDLVRGTLCPALK ALFEHGLKKPSLLGGACHPWLFI EEAAGREVERDFASVYSRLVL CKTFRLEDGKVLTPPELLYRAVQSVNVTHDAVHAQMDVKLRSL ICVGLNEQVLHLWLEVLCSLPTVEKWPQWFLRSPGWVQIKC ELRVLCFAFSLSQDWELPAKREAQQPLKEGVRDMLVKHHLFSW DVDG |
| 6347 | 2921 | 533 | QDRRLRLRLQKTCQPTSTMSGSHTPACGPFSAITPSIWPQETL AKYTQKEESAEPFYDEFGRVYKEEGDEPGSSLLANSPLME DAPQRLRWQAHLFTTHNDVGDLTWDKIAVSLPRSEKLRSLVLA GIPHGMRPQLWMRLSGALQKKRNSLSYREIVKNSNDETIAAK QIEKDLRTMPSNACFASMGSGIVPRLRRVLRALAWLYPEIGYC QGTGMVAACLLLFLEEDAFWMMSAI IEDLLPASYPSTTLTGVO TDQVLRHLIVQYLPRLDKLLQEHDI ELSLITLHWFLTAFASV DIXLLRLRIWDLFFYEGSRVLFQTLTGLMLHLKEELIQSENSASI FNTLSDI PSQMEDAELLGVMRLAGSLTDVAVETQRRKHLAYL IADQGQLLGAGTLTNLSQVVRRTQRRKSTITALLFGEDDLEAL KAKNIKQTELVDLREAILRVARHFQCTDPKNCVSVSRQLPGLL PNTALTPTPLVGLYSLWQELTPDYSMESHQRDHENYVACSRSH RRAKALLDFERHDDDELGFRKNDIITIVSQKDEHCWVGELNGL RGWFFPAKFVEVLDERSEKEYS IAGDDSVTEGVTDLVRGTLCPALK ALFEHGLKKPSLLGGACHPWLFI EEAAGREVERDFASVYSRLVL CKTFRLEDGKVLTPPELLYRAVQSVNVTHDAVHAQMDVKLRSL ICVGLNEQVLHLWLEVLCSLPTVEKWPQWFLRSPGWVQIKC ELRVLCFAFSLSQDWELPAKREAQQPLKEGVRDMLVKHHLFSW DVDG |
| 6348 | 3 | 3679 | AGAECFVTLACFLAKQONKYKYECKDLIKSMLRNLQFKKE KLAELQKQAEELRQYKVLVHSQERELTQLREKLREGRDASRLN EHLQALLTPDEPDKSQGDLEQLAEGCRLAQHLVQKLSPENDN DDEDEVQVEVAEKVQKSSSPREMQKAEKEVPEDSLEECITCS NSHGFCDSNQPHKNIKITFEEDENVSTLVVDRESSHDECQDALN ILPVPPTSSATNVSMVVSAGPLSGEKAANILEINEKLRPQLA EKKQQFRNLKEKCFTLQACFLANQONKYKYECKDLIKFMLRN ERQFKKEKLAELQKQAEELRQYKVLVHSQERELTQLREKLREGR DASRLNEHLQALLTPDEPDKSQGDLEQLAEGCRLAQHLVQK LSPENDNDDDEVQVEVAEKVQKSSAPREMPKAEKEVPEDSLE |

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|------------|--|--|---|
| | | | <p>ECAITCSNSHGPDYDSNQPHRKTKITFEEDKVDSTLIGSSSHVEW</p> <p>EDAVHIIIPENESDDEEEEEKGPVSPRNQSEEEFVPQESWDEG</p> <p>YSTLSIPPEMLASYKSYSTFHSLEEQQVCMVDIGRHRWDQVK</p> <p>KEDHEATGPRLSRELLDEKGPVQLQDSLDRCYSTPSGCLELTDS</p> <p>CQPYRSAFYVLEQQRVGLAVNMDIEIKYQEVEEDQDPSCPLSR</p> <p>ELLDEKEPEVLQDSLGRCYSTPSGYLELPDLGQPYSSAVYSLEE</p> <p>QYLGLALDVEDRIKKDQEEEDQGPCCPLRSRELLVVEPEVLQD</p> <p>SLDRCYSTPSSCLEQPDSCQPYGSSFYALEEKHVGFSLDVGEIE</p> <p>KKGKGKKRRGRRSKKERRRRGRKEGEDQNPCCPLRSRELLDEKG</p> <p>PEVLQDSLDRCYSTPSGCLELTDSQPYRSAFYILEQQRVGLAV</p> <p>DMDEIEKYQEVEEDQDPSCPLSGELLDKEPEVLQESLDRCYST</p> <p>TPSGCLELTDSQPYRSAFYILEQQRVGLAVDMDEIEKYQVEVEE</p> <p>DQDPSCPLRSRELLDEKEPEVLQDSLGRCYSTPSGYLELPDLGQ</p> <p>PYSSAVYSLEEQYLGLALDVEDRIKKDQEEEDQGPCCPLRSRELL</p> <p>LEVVEPEVLQDSLDRCYSTPSSCLEQPDSCQPYGSSFYALEEKH</p> <p>VGFSLDVGEIEKKGKGKKRRGRRSKKERRRRGRKEGEDQNPCCP</p> <p>RLNSMLMEVEEPEVLQDSLDRCYSTPSMYFELPDSFQHYRSVVFY</p> <p>SFEEDHISFALYVDNRFFTLTVTSLHLVFMGVIFPO</p> |
| 6349 | 3 | 3679 | <p>AGAEKCFVTLACFLAKQNKYKYECKDLIKSMLRNELQFKEE</p> <p>KLAEQLQAEELRQYKVLVHSQERELTQREKLREGRDASRSLN</p> <p>EHLQALLTPDEPKSQGQDLQEQLAEGCRLAQHLVQKLSPENDN</p> <p>DDDEDVQVEVAEKVKSSSPREMKAEEKEVPEDSLEECITCS</p> <p>NSHGPDNSNQPHKNIKITFEEDVNSTLVVDRESSHDECQDALN</p> <p>ILPVPGPTSSATNVSMVVSAGPLSGEKAANILEINEKLRLPQLA</p> <p>EKKQQFRNLKEKCFLTQLACFLANQNKYKYECKDLIKFMLRN</p> <p>ERQFKEEKLAELQAEELRQYKVLVHSQERELTQREKLREGR</p> <p>DASRSLNEHLQALLTPDEPKSQGQDLQEQLAEGCRLAQHLVQK</p> <p>LSPENDNDDDEDVQVEVAEKVKSSAPREMPKAEKEVPEDSLE</p> <p>ECAITCSNSHGPDYDSNQPHRKTKITFEEDKVDSTLIGSSSHVEW</p> <p>EDAVHIIIPENESDDEEEEEKGPVSPRNQSEEEFVPQESWDEG</p> <p>YSTLSIPPEMLASYKSYSTFHSLEEQQVCMVDIGRHRWDQVK</p> <p>KEDHEATGPRLSRELLDEKGPVQLQDSLDRCYSTPSGCLELTDS</p> <p>CQPYRSAFYVLEQQRVGLAVNMDIEIKYQEVEEDQDPSCPLSR</p> <p>ELLDEKEPEVLQDSLGRCYSTPSGYLELPDLGQPYSSAVYSLEE</p> <p>QYLGLALDVEDRIKKDQEEEDQGPCCPLRSRELLVVEPEVLQD</p> <p>SLDRCYSTPSSCLEQPDSCQPYGSSFYALEEKHVGFSLDVGEIE</p> <p>KKGKGKKRRGRRSKKERRRRGRKEGEDQNPCCPLRSRELLDEKG</p> <p>PEVLQDSLDRCYSTPSGCLELTDSQPYRSAFYILEQQRVGLAV</p> <p>DMDEIEKYQEVEEDQDPSCPLSGELLDKEPEVLQESLDRCYST</p> <p>TPSGCLELTDSQPYRSAFYILEQQRVGLAVDMDEIEKYQVEVEE</p> <p>DQDPSCPLRSRELLDEKEPEVLQDSLGRCYSTPSGYLELPDLGQ</p> <p>PYSSAVYSLEEQYLGLALDVEDRIKKDQEEEDQGPCCPLRSRELL</p> <p>LEVVEPEVLQDSLDRCYSTPSSCLEQPDSCQPYGSSFYALEEKH</p> <p>VGFSLDVGEIEKKGKGKKRRGRRSKKERRRRGRKEGEDQNPCCP</p> <p>RLNSMLMEVEEPEVLQDSLDRCYSTPSMYFELPDSFQHYRSVVFY</p> <p>SFEEDHISFALYVDNRFFTLTVTSLHLVFMGVIFPO</p> |
| 6350 | 3 | 3679 | <p>AGAEKCFVTLACFLAKQNKYKYECKDLIKSMLRNELQFKEE</p> <p>KLAEQLQAEELRQYKVLVHSQERELTQREKLREGRDASRSLN</p> <p>EHLQALLTPDEPKSQGQDLQEQLAEGCRLAQHLVQKLSPENDN</p> <p>DDDEDVQVEVAEKVKSSSPREMKAEEKEVPEDSLEECITCS</p> <p>NSHGPDNSNQPHKNIKITFEEDVNSTLVVDRESSHDECQDALN</p> <p>ILPVPGPTSSATNVSMVVSAGPLSGEKAANILEINEKLRLPQLA</p> <p>EKKQQFRNLKEKCFLTQLACFLANQNKYKYECKDLIKFMLRN</p> <p>ERQFKEEKLAELQAEELRQYKVLVHSQERELTQREKLREGR</p> <p>DASRSLNEHLQALLTPDEPKSQGQDLQEQLAEGCRLAQHLVQK</p> <p>LSPENDNDDDEDVQVEVAEKVKSSAPREMPKAEKEVPEDSLE</p> |

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|------------------|---|--|--|
| | | | <p>ECAITCSNSHGPFYDSNQPHRKTITFEEDKVDSTLIGSSSHVEW EDAVHIIIPENESDDEEEEEKGPVSPRNQSEEEVEVPQESWDEG YSTLSIPPEMLASYKYSSTFHSLEEQQVCMAVDIGRHRWDQVK KEDHEATGPRLSRELLDEKGPVLDQSLDRCYSTPSCGLELTD CQPYRSAPYVLEQQRVGLAVNMDEIEKYQEVEEDQDPSCPLSR ELLDEKEPEVLQDSLGRCYSTPSGYLELPDLGQPYSSAVYSLEE QYLGALDLDRIKKDQEEEDQGGPPCPLSRELLLEVVEPEVLQD SLDRCYSTPSSCLEQPDSCQPYGSSFYALEEKHVGPSLDVGEIE KKGKGGKRRGRSKKERRRGRKEGEDQNPCCPLSRELLDEKG PEVLQDSLDRCYSTPSGCLELTDSCQPYRSAPYILEQQRVGLAV DMDEIEKYQEVEEDQDPSCPLSGELLDEKEPEVLQESLDRCYST TPSGCLELTDSCQPYRSAPYILEQQRVGLAVDMDEIEKYQEVEE DQDPSCPLSRELLDEKEPEVLQDSLGRCYSTPSGYLELPDLGQ PYSSAVYSLEEQYLGALDLDRIKKDQEEEDQGGPPCPLSRELL LEVVEPEVLQDSLDRCYSTPSSCLEQPDSCQPYGSSFYALEEKH VGPSLDVGEIEKKKGKGGKRRGRSKKERRRGRKEGEDQNPCCP RLNSMLMEVEEPEVLQDSLDRCYSTPSMYFELPDSFQHYRSVVFY SFEEEHISFALYVDNRFFTLTVTSLHLVFMGVIFPQ</p> |
| 6351 | 1291 | 319 | <p>REARRRTERSQGRMLVVEVANGRSVLVGAFAVQALRRERLGVGG RTVGLPRGPRQNSRLGLPLLLMPEEARLLAEIGAVTLVSAPRP DSRHHSLALTSFKRQEEESFQEQSALAAEARETRQELLEKITE GQAACKQKLEQASGASSSQEAGSSQAKEDETSQDQASGEQEA GPSSSQAGPSNGVAPLPRSALLVQLATARPVPVKARPLDWRVQS KDWPHAGRPAHELRYSIYRDLWEGFFLSAAGKFGGDFLVYPGD PLRFHAHYIAQCWAPEDTIPLODLVAAGRLGTSVRKTLTLLCSPO PDGKVVTSLQWASLQ</p> |
| 6352 | 235 | 923 | <p>WSEWLSPCAAKCKGLSMLRITMKTRAISSLAADATFVQGRSAP AMARSLVHDTVFYCLSVYQVKISPTPQLGAASSAEGHVGGGAPG LMGNMNPPEGVNHENGMNRDGGMIPEGGGGNQEPQPPPPPEE PAQAAMEGPPENMQPRTRRTKFTLLQVEELESVFRHTQYPDVP TRRELAENLGVTEKVRVWFKNKRARCRRHQRELMLANELRADP DDCVYIVVD</p> |
| 6353 | 65 | 672 | <p>RFAGAGATPEARARPPDVQAAEEEEKEMDLPDSASRVPCGRILSM VNTDDVNAIILAQKNMLDRFEKTNEMLLNPNLSSARLQOMSER FLHHTRTLVEMKRDLDSIFRIRITLKGKLARQHPAFSHIPEAS FLEEDEDPIPPSTTTTITATSEQSTGSCDTSPTVSPSLSPGFE DLSHVQPGSPAINGRSQTDDEEMTGE</p> |
| 6354 | 965 | 510 | <p>PSLRPMEPTRDCPLFGGAFSAIILPMGAIDVSDLRPVPDNQEVFC HPVTDQSLIVELLELAHVGEAAARYHFEDVGGVQGARAVHVE SVQPLSLENLALRGRCQEAOWLSGKQIAKENQVQVADVTLLHQA LLRLPQYQTDLLLTFFNQPP</p> |
| 6355 | 158 | 1662 | <p>RGSSAARFGSGLRGAMIRRVLPHGMRGLLRRPGTRRGGSFSD WDGKVSEIKKKIKSILPGRSCDLLQDTSHPPEHSDVVIVGGGV LGLSVAYNLKKLESRRGAIRVLVVERDHTYSQASTGLSVGGICQ QFSLPENIQLSLFSASFRLNINEYLAVVDAPPLDLRFNPSGYLL LASEKDAAAMESNVKVRQEGAKVSLMSPDQLRNKFPWINTGCV ALASYGMEDEGWFDWCLLQGLRRKVQSLGVLCQGEVTRFVSS SQRMILTDDKAVVLKRIHEVHVKMDRSLEYQPVCAIVINAAGA WSAQIAALAGVGEPPGTQGTCLPVEPRKRYVYVWHCPQGPGL ETPLVADTSGAYFRREGLSNYLGGRSPTEQEEPPANLEVDHD FFQDKVWPHLALRVPAFETLKVQSAWAGYDYNTFDQNGVVGPH PLVVNMYFATGFSGHGLQAPGIGRAVAEMVLKGRFQTDLSPPF LFTRFYLGEKIQENNI</p> |
| 6356 | 354 | 633 | <p>TGLTSSCLPLQVMMTKRTKDMGKFSSVTSTIDEDEEEIEAREV ADSYAQNAKVIKQLERKGMSSKRRQLQELAEAKAKMKGTLLID NQFK</p> |

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|------------|--|--|--|
| 6357 | 2 | 915 | GLLRNMALLVRVLRNQTSISQWVPVCSRLIPVSPTQCGGDRALS RTSQNPQMSQSQACGGSEQIPGIDIQLNRKYHTTRKLSTTKDSP QPVEEKVGAF TKIIBAMGFTGPLKYSKWKIKIAALRMYTSCVEK TDFEEFFLRQMPDFTNSWFLITLLHVWMLVRMKQEGRSCKYM CRIIVHFMMWEDVQQRGRVMGVNPIYLKKNMILMTNHFYAAILGY DEGILSDDHGLAAALWRTTFNRKCEDPRHLELLVEYVRKQIQYL DSMNGEDLLLTGEVSWRPLVEKNPQSILKPHSPTYNDEGL |
| 6358 | 2009 | 1040 | ASDALHSLAPVLRLLSSRSARPATMTQATSFADFLAGGIAA AISKTA VAPIERVKLLQVHASKQIAADKQYKGI VDCIVRIPK EOGVLSFWRGNLANVIRYFPTQALNFAFKDKYKQIFLGVDKHT QFWRYFAGNLASGGAAGATSLCFVYPLDFARTLAADVKGSGTE REFRGLGDCLVKITKSDGIRGLYQGGFSVSVQGGIIYRAAYFGVY DTAKGMLPDPKNTHIVVSWMIAQT VTA VAGVVSYPEDTVRRMM MQSGRKADIMYGTVDWCWKIFRDEGGKAFKGAWSNVLRGMG GAFVLVLYDELKKVI |
| 6359 | 98 | 1086 | VCRQEEKMKEDCLPSSHVPISDSKSIQKSELLGLLTKTYNCYHE GKSFQLRHREEEGTLIEGLLNIAWGLRRPRLQMQDDREQVHL PSTSWMPRRPSCPLKEPSPQNGNI TAQGPSIQPVHKAESSTDSS GPLEEAEAEAPQLMRKSDASCMSQRRPKCRAPGEAQRI RHRFS INGHFYNHKT SVTFAYGSVTVNRVNSTMTTLQVLTLLLNKFRV EDGPSEFALYIVHESGERTKLKDCYEPLISRI LHGPCEK IARIF LMEADLGVEVPHEVAQYIKFEMPVLDSFVEKLKEEEREI IKLT MKFQALRLTMLQRLQELVEAK |
| 6360 | 1 | 345 | GTRGAVPSTLEEVVLPFRSCRWFVHSGITMSKVSFKITLTSDF RLPYKVLVSVESTPFTAVLKFAAEFFKVPAPATSAITNDGIGIN PAQTAGNVFLKHGSELRIIPRDRVGS |
| 6361 | 615 | 158 | RPGLQLOHICALAPQAGNRRCRFHGRHALTRSTHRGKPMSTMQ FKD TLNTPLPDSFPVAVPLGAPIAVASTLSVEHNDGVETGIWAC APGRWRRQITSQEFCHFIQGRCTFTPDGGETLHIQAGDALMLPA NSTGIWDIQETVRKTYVLIL |
| 6362 | 350 | 1576 | TTMDGSHSAALKLOQLPPTSSSSAVSEASFSYKENLIGALLAIF GHLVVSIALNLQKYCHIRLAGSKDPRA YFKTKTWLGLFLMLLG ELGVFASVAFAPLSLIVPLSAVSVIASAIGIIFIXEKWKPKDF LRRVLSFVGCGLAVVGTYLLVTFAPNSHEKMTGENVTRHLVSV PFLLYMLVEIILFCLLLYFYKEKNANNIVVILLVALLGSM TVV TVKAVAGMLVLSIQGNLQLDYPIFYVMFVCMVATAVYQA AFLSQ ASQMYDSSSLIASVGYLSTTIAITAGAI FYLDFIGEDVLHICMF ALGCLIAFLGVFLITRNRRKP I PFEPYISMDAMPQMNMHDKGM TVQPELKASFSYGALENNNDNISEIYAPATLPVMQEEHGSRSASG VPYRVLEHTKKE |
| 6363 | 21 | 1201 | RRTRLGSSFFRRRDSSAMESYDVIANQPVVIDNGSGVIKAGFAG DQIPKYCFPNYVGRPKHVRVMAGALEGDI FIGPKAEHRGLLSI RYPMEHGIVKDWNDMERIWQYVYSKDQLQTFSEHPVLLTEAPL NPRKNRERAAEVFFETFNVPALFISMQAVLSLYATGRTTGVVLD SGDGVTHAVPIYEGFAMPHSIMRIDIAGRDVSRFLRLYLKKEGY DFHSSSEFEIVKAIKERACYLSINPQKDETLETEKAQYYLPDGS TIEIGPSRFRAPELLFRPDLIGESEGEIHEVLVFAIQSDMDLR RTLFSNIVLSGGSTLFKGFGRDLLSEVKKLAPKDVKIRISAPQE RLYSTWIGGSILASLDTFKMMWVSKKEYEBDGARS IHRKTF |
| 6364 | 21 | 1201 | RRTRLGSSFFRRRDSSAMESYDVIANQPVVIDNGSGVIKAGFAG DQIPKYCFPNYVGRPKHVRVMAGALEGDI FIGPKAEHRGLLSI RYPMEHGIVKDWNDMERIWQYVYSKDQLQTFSEHPVLLTEAPL NPRKNRERAAEVFFETFNVPALFISMQAVLSLYATGRTTGVVLD SGDGVTHAVPIYEGFAMPHSIMRIDIAGRDVSRFLRLYLKKEGY DFHSSSEFEIVKAIKERACYLSINPQKDETLETEKAQYYLPDGS TIEIGPSRFRAPELLFRPDLIGESEGEIHEVLVFAIQSDMDLR |

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|------------|--|--|--|
| 6365 | 234 | 1989 | RTLFSTNIVLSGGSTLFGGFGDRLLSEVKKLAPKDVKIRISAPQE RLYSTWIGGSILASLDTFKKMWVSKKEYEEDGARSIRHRTF KHKSRAACAARAQAFGPSREREVHSRFRSGLRRLGESNSGCCCTM ASMTGLAFDEYGRPFLLIKDQDRKSRLMGLEALKSHIMAAKAVA NTMRTSLGPNGLDKMMVDKGDVTVTNDGATILSMDVDHQIAK LMVELSKSQDDEIGDGTGTVVVLGALLLEAEQLLDRIPIRI ADGYEQAAARVAIEHLDKISDSVLVDIKDTEPLIQAKTTLGSKV VNSCHROMAEIAVNAVLTVADMERRDVFELIKVEGKVGGRLED TKLIKGVIVDKDFSHQMPKKVEDAKIAITLCPPEPPKPKTKKH LDVTSVEDYKALQKYRKEKFEEMIQQIKETGANLAICQWGFDD ANHLLQNNLPAVRWVGGEPEIELIAIATGGRIVPRFSELTAELK GFAGLVQEISFGTTKDKMLVIEQCKNSRAVTIFIRGGNKMIIE AKRSLHDALCVIRNLIRDNRVYGGGAETS CALAVSQEADKCP TLEQYAMRAFADALEVIMALSENSGMNPIQTMTEVRARQVKEM NPALGIDCLHKGTDNDMKQOHVETLIGKKQIISLATQVMRMLK IDDIRKPGESSE |
| 6366 | 257 | 1898 | GNKEGAHSSTFWLLSIFLGAVAMLCKEQGITVLGLNAVFDILV IGKFNVLQVQLVHDKSLENLGLMRNGLLFRMTLLTSGGAG MLYVRWRIMGTPPAFTVDNPAFADSMVRAVNYNYYSINA WLLCPWWLCFDWSMGCIPLIKISDWRVIALAALWFLIGLIC QALCESDGHKRIILTLGLGLVIFPLPASNLFRVGVVVAERVL YLPSVGYCVLLTFGFGALS KHTKKKLLIAAVVLGILFINTLRV LRSGEWRSEEQLFRSALSVCPLNAKVHYNIGKNLADKGNQTAI RYREAVRLNPKYVHAMNNLGNILKERNELQEAELLSLAVQIQ PDFAAAMNNGIVQNSLKRFEAAEQSYRTAIKRRKYPDCYYNL GRLYADLNRHVDALNAWRNATVLKPEHSLAWNMIILLDNTGNL AQAEAVGREALELIPNDHSLMFLANVLGKSQKYKESALPLKA IKANPNAAASYHGNLAVLYHRWGHLLDAKHYEISLQDPTASGT KENYGLLRKLELMQKKA |
| 6367 | 287 | 1934 | SIGFPVMLVLSILLYTCMFQDSVAFEDVAVSFTQEEWALLDPS QKNLYRDVMQETFKNLTSVGKTWKVQNIIEDEYKNPRNLSLMRE KLCESKESHHCESFNQIADDMLNRKTLPGITPCESSVCGEVGT GHSSLNTHIRADTGHKSSEYQYGENPYRNKECKKAFSYLDSFQ SHDKACTKEKPYDGKECTETFIHSHCIQRHRVMHSGDGPYKCF CGKAFYFLNLCLIHERIHTGVKPYCKQCGKAFTRSTTLPVHER THTGVADECKECCGNAFSPSEIRRHRKRSHTGEKPYECKQCGKV FISFSSIQYHKMTHTEKPYECKQCGKAFRCGSHLQKHGRTHTG EKPYECKQCGKAFRCSTDLQRHEKHTEDKPYCKQCGKGFRCASQLQIHERTHSGEKPHECKECCGVFKYFSSLR IHERTHTEKPYECKQCGKAFRYFSSLIHERTHTGDKPYECKVCGKAFTRCSSLIR YHERTHTEKPYECKHCGKAFISNYIRYHERTHTEKPYQCKQC GKAFIRASSCREHERTHTINR |
| 6368 | 1 | 327 | RPVPAKLNPSPWRTAGALPLRPPPLTMAVHFHDEVEIEDFYDE DSITYFYPCPGDNFSITKEDLENGEDVATPCSPCSLI IKVIYDK DQFVCGETVPAPSANKELVKC |
| 6369 | 1 | 1745 | AGCCRDTRFPTFRGPGSLCHNFCRSAACTVTRTIHSGSPREDTGT PRSREMMFQDSVAFEDVAVSFTQEEWALLDPSQKNLYRDVMQET FKNLTSVGKTWKVQNIIEDEYKNPRNLSLMREKLCESKESHHC ESFNQIADDMLNRKTLPGITPCESSVCGEVGTGHSSLNTHIRAD TGHKSSEYQYGENPYRNKECKKAFSYLDSFQSHDKACTKEKPY DGKECTETFIHSHCIQRHRVMHSGDGPYKCFCKGKAFYFLNLCL IHERIHTGVKPYCKQCGKAFTRSTTLPVHERTHTGVADECKE CGNAFSPSEIRRHRKRSHTGEKPYECKQCGKVFISFSSIQYHKM THTEKPYECKQCGKAFRCGSHLQKHGRTHTEKPYECKQCGKAFRCSTDLQRHEKHTEDKPYCKQCGKGFRCASQLQIHERTHSG EKPECKECCGVFKYFSSLR IHERTHTEKPYECKQCGKAFRYF |

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|------------|--|--|--|
| | | | SSLHIHERHTHTGDKPYECKVCGKAPTCSSTRYHERHTHTGKPYECKHCGKAFISNYIRYHERHTHTGKPKYQCKQCGKAFIRASSCREHERHTTNR |
| 6370 | 1711 | 329 | FVLSEQRRLRTERTPRSPGLRGAAAAGARTAGAGLLRLLGCGALVGGRLRPVTMTTPANAQNAKTWELSLYELHRTPOEAIMDGTEDIAVSPRSLHSELMCPICLDMKNTMTTKECLHRFCSDCIVTALRSGNKECPTCRKKLVSKRSLRPDPNFDALISKIYPSREYEAHQDRVLIIRLSRLHNQALSSSIEEGLRMOAMHRAQRVRRPIPGSDQTTTMSGGEGEPGEGEDGEDVSSDSAPDSAPGPAPKRRPGGGAGGSSVGTGGGGTGGVGGGAGSEDSGDRGGLGGGTLGPPSPPGAPSPEPFGGEIELVFRPHLLVEKGEYCQTRYVKTGNATVDHLSKYLALRIALERRQQQEAGEPGGPGGASDTGGPDGCGEGGGAGGVDGPEEPALPSLEGVSEKQYTIYIAPGGGAFTTLNGSLTLELVNEKFWKVSRLPLELCYAPT KDPK |
| 6371 | 3 | 288 | GVANMSTAMNFGTKSFQPRPPDKGSFPLDHLGECKSFKEKFMKCLHNNNFENALCRKESKEYLECRMERKMLQEPLEKLGFGDLTSGKSEAKK |
| 6372 | 2141 | 625 | RVSATASEGKAERYKKLEDLLEKSFSLVKMPSLPQVVMCMVKHLPKVPEKKLKVMADELYRACAVEVRRQIQWQDQALFGDEVSPLLKQYILEKESALFSTELSVLHNNFSPSPKTRRQGEVVQRLTRMGKNVLYDMVLQFLRTLFLTRNVHYCTLRALLMSLHDLQVEICTVDPCCHKFTWCLDACIRERFVDSKRARELQGFLDGVKKQGEQVLGDLMSILCDPFAINTLALSTVRHLQELVGQETLPRDSPDLLLLRLRLALQGQANDMIDSQVFKEPKMEVELITRFLPMLMSFLVDYTFNVQKLPAEEKAPVSYNTLPESFTKFLQEQRMACEVGLYVVLHITKQRNKVALLRLLPGLVETPGDLAFGDFLHLITGNLALADEFALEDFCSSFLDFGFFLTASPRKENVHRHALRLLIHLHPRVAPSKLEALQKALEPTGQSGEAVKELYSQLEKLEQLDHRKPSPAQAETPALELPLPSVPAPAPL |
| 6373 | 67 | 711 | PSRAARASPARLZAMVSWIISRLVVLIFGTLYPAYYSYKAVKSKDIKEYVKWMYWIIFALFTTAETFTDIFLCWFFPYELKIAFVAWLLSPYTKGSSLLYRKVFVHTLSSKEKEIDDCLVQAKDRSYDALVHFQKRGVNAATAAAMAAKGGQALSERLSFSMQDLTTIRGDGAPAPSGPPPPGSGRAGSGKHGQPKMSRSASESASSSGTA |
| 6374 | 535 | 2105 | HKLFCSYISTSEFPSSSTRHSCPTHTFCNYTSSTIFLSSTRDHS CPHTHTFCNYTSSTIFLSSTRDHSCTHTSCNYTSSTIFLSSTRD HSCPTHTSCNYTSSTIFLSSTRDHSCTHTFCNYTPRIIRLSSC CPABLQTEGSNGKKEVLSGFQVLEDTVLFPEGGGQDDRGTYN DISVLVTRRGEQADHFTQTPLDPGSQVLVRVDWERRFDHMQH SQOHLITAVADHLFKLKTTSWELGRFRSAIELDTPSMTAEQVAA IEQSVNEKIRDLPLVNVRELSLDDPEVEQVSGRGLPDDHAGFIR VVNIIEGVDSNMCCGTHVSNLSLDQVIKILGTEKGNKNTNLIFL SGNRVLKWMERSHGTEKALTALLKCGAEDHVEAVKKIQNSTKIL QKNLNLRLDLAVHIAHSLRNSPDWGGVVILHRKEGDSEFMNII ANEIGSEETLLFLTVDGDEKGGGLFLLAGPPASVETLGPVAVEL EKGAGKKGRFQGGKATKMSRRMEQAALLQDYISTQSAKE |
| 6375 | 1 | 1535 | AIMAAATRPVRLPEAGCEGRERCWNPSSRSRSHSGEGGLAASRTCPGRPRRPGQVVRGPTMLVTAYLAFVGLLASCLGLELSRCRAKPPGRACSNPSFLRFQDFYQVYFLAALADWLQAPYLYKLYQHYYFLEGQIAILYVCGLASTVLFGLVASSLVDWLGRKNSCVLFSLTYSLCCLTKLSQDYFVLLVGRALGGLSTALLFSAFEAWYIHEHVERHDFPAEWIPATFARAFAFNHVLAVVAGVAEAVASWIGLGPVAPFVAIPLALAGALALRNNGENYDRQRAFRTACAGGLRCLLSDRVLLGTIQALFESVIFIFVFLWTPVLDPHGAPLGIIFSSFMAASLLGSSLYRIATSKRYHLQPMHLLSLAVLIVVFSLFMLTFTSTSPGQESPVESFIAFLLIELACGLYFPPMSFLRRKVIPETEQAQVLN |

496

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|------------|--|--|--|
| | | | LKDLSDGIHVVDAREDFTSLENTVEERITELTKSINDNIAIF TEVQKRSQKEINDMKAKVASLESEGNKQDLKALKEAVKEIQTS AKSREWDMEALRSTLTQTMESDIYTEVRELVSLEKQEQAFKEAD TERLALQALTEKLLRSEESVSRLPEEIRLEELRQLKSDSHGP KEDGGFRHSEAFALQKQSGGLDRLQHVEDGVLSMQVASARQT ESLESLLSKSQEHEQRLAALQGRLEGLGSSEADQDGLASTVRS GETQLVLYGDEVLEKRSVGLPSTVESLQKVQEVHTLLSQDQA QAARLPQDFLDRLSSLDNLKASVSQVEADLMLRTAVDSLVA SVKIETNENNLESAGLLDLDRLDLRLFVKVEKIHKEKV |
| 6384 | 738 | 1904 | IWEVPCVCLTHLHLQQAQPLPPSSSINEEDADEANRAIGEK AAPDSGKKPKTPKTKQKDPENEPQKPVSAAYLFFRDTOAAIKGQ NPNATFGEVSQIVASMWDSLGEQKQVYKRKTEAAKKEYLKALA AYRASLVSKAAAEABAAQTIRSVQQTLASTNLTSLLNLTPLSQ HGTVSASPQTLQQLPRSIAPKPLTMRPLMNQIVTSVTIAANMP SNIGAPLISSMGTMTVGSAPSTQVSPSVQTQQHQMQLQQQQQQ QQQMOMQQQQQLQQHMQHQQIQQQMQQQHQQHMQHQQHQQH LQQQINQQQLQQQLQQRLQLQQHMQHQSQSPSPROHSPVASQI TSPIPAIGSPQASQHQSQIQSQQTQTVLSQVSI |
| 6385 | 2 | 1584 | PRVRADVAAGAAQVVSAGMAKNGENGFRAAPAAGESLSGTRES LAQGPDAATDELSSLSGSDSEANGFAERRIDKFGFVIGSQGABG ALEEVPLEVLQRRESKWLDMNLNWDKWMKAKKKIRLRCQKGI PSLRGRAWQYLSGGKVKLQONPGKFDLDMSPGDPKWLVDIERD LHRQTFPHEMFVSRGGHGQDLFRVLKAYTLRPEEGYCAQAP IAAVLLMHMPAEQAFWCLVQICEKYLPGYSEKLEAIQLDGEIL FSLQKVSPVAHKHLSRQKIDPLLYMTIEWFMAFSRTLPWSSVL RVWDMFFCEGVKIIFRVGLVLLKHALGSPKVKACQGGQYETIER LRLSPKIMQEAFLVQEVVELPVTERQIEREHLIQLRRWQETRG BLQCRSPPLRHGAKAILDABGFRPALQSPSIRLPLDAPLPGS KAKPKPPKQAKQKQKQKQKQKQKQKQKQKQKQKQKQKQKQKQ PQHVPFKDSAPKDSAPQDLAPQVSAHRSQESLTSQESDITYL |
| 6386 | 819 | 195 | TVCGSFYLGIMQASRLKRELHMLATEPPPGITCWDQDKQMDLL RAQILGGANTPYEKGVFLEVIIPERYPFEPPIRFLPIYHFN IDSAGRICLDVLKLPKGAWRPSLNIATVLTSLIQLLMSEPNPDD PLMADISSEFKYNKPAFLKNARQWTEKHARQKQKQKQKQKQKQKQ PEAGDSRVHNSQKRRKASQLVGIEKKFHPDV |
| 6387 | 1 | 662 | PGPTHASADAWADAWAQPNMAMHNKAAPPQIPDTRRELAEVLR KQELAEATLANLERQIYAFEGSYLEDQMYGNIIRGWDRYLTNQK NSNSKNDRRNRKFKEAERLFSKSSVTSAAAVSALAGVQDQLIEK REPGSGTESDTSDFHNQENEPSQEDPEDLDGVSQGVKPKQKAS STSSGSHHSSHKRRKNKNRHSPSGMFDYDFEIDLKLNKKPRADY |
| 6388 | 1 | 662 | PGPTHASADAWADAWAQPNMAMHNKAAPPQIPDTRRELAEVLR KQELAEATLANLERQIYAFEGSYLEDQMYGNIIRGWDRYLTNQK NSNSKNDRRNRKFKEAERLFSKSSVTSAAAVSALAGVQDQLIEK REPGSGTESDTSDFHNQENEPSQEDPEDLDGVSQGVKPKQKAS STSSGSHHSSHKRRKNKNRHSPSGMFDYDFEIDLKLNKKPRADY |
| 6389 | 1074 | 497 | AEPGDRMAGHRLVLVLGDLHIPHRCNSLPKPKKLLVPGKIQHI LCTGNLCTKESYDYLKTLAGDVHIVRGDFDENLNYPEQKVTVG QFKIGLIHQVQIPWGDMAALLQORQFDVDILISGHTHKPEAF EHENKFYINPGSATGAYNALETNIIPSFVLMDIQASTVTVYVQ LIGDDVKVERIEYKPK |
| 6390 | 158 | 535 | GEERKEGRAPCKAFAPERNPAKMEKEETTRELLPNWQSGSHG LTIARDDGQVQVETQNSPAARTGVVKEGQIVGATIIYFDNLQ SGEVTQLLNTMGHHTVGLKLRKGRDFFPSLGQTWDP |
| 6391 | 5386 | 2897 | VRWNSKTECYLSIQTQENFPANLNELVNCIVISSLVTTQRLKLA MSLLGSRNQLARAVLNPNMDFCTKDLLTTTSERIAYLDFNE DQKKAETAYAMVKHSPSVAKICLIHGPPGTGSKTIVGLLYRL |

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|------------|--|--|--|
| | | | LTENQRKGHSDESNNAIKQNRVLVCAPSNAAVDELMKKIILEF KECKDKKNPLGNCGDINLVRGPEKINSSEVLKFSLDSQVNH MKKELPSHVQAMHKRKEFLDYQLDELRSQRALCRGGREIQRQEL DENISKVSKERQELASKIKEVQGRPKTQSIIILESHIICCTLS TSGGLLLESAFRGGGVPPFSCVIVDEAGQSCSEIETLTPLIHRCN KLILVGDPKQLPPTVISMKAQBYGYDQSMARFCRLLEENVEHN MISRLPILQLTVQYRMHPDICLFPSSNYVYNNRLKTNRQTEAIRC SSDWPFQPYLVFDVGDGSERRDNDYSINVOEIKLVMEIILKIKD KRKDVSRNIGIITHYKAQKTMIOKDLDEKFDKGPAEVDTVDA FQGRQKDCVIVTCVRANSIQSGIGFLASLQRLNVTITRAKYSLF ILGHLRTLMEHQHWNQLIQDAQKRGAIKTCCKNYRHDVAKILK LKPVLQRSILTHPPTIAPEGSRPQGLPSSKLDGSAKTSVAASL YHTPSDSKEITLTVTSKDPERPPVHDQLDPRLLKRMGIEVKGK IFLWDPQSSPQHPGATPPTGEPGFVVHQLSHVQPPAAVVAA LSSHKFPVRGEPFAASPEASTCQSKCDDPEBELCHRRERAFSE GEQEKCGSETHHTRNSRWDRKTLQEDSSSKKRKLL |
| 6392 | 972 | 186 | GRGTVDLASSMAHRLQIRLLTWDVKDTLLRLRHLGEAYATKAR AHGLEVEPSALEQGFQRAYRAQSHPFNGLSHGLTSRQWNLVDV VLQTFHLAGVQDAQAVAPIAEQLYKDFSHFCTWQVLDGAEDTLR ECRTRGLRLAVISNFRRLLEGILGGLGLREHFDVLTSEAAGWP KPDPRIFQEAALRLAHMEPVVAHVGDNYLCDYQGFRAVGMHSFL VVGPDALDPVVRDSVPKEHILPSLAHLPLALDCLGSGTPGL |
| 6393 | 2017 | 730 | TGGSKMAAVATCGSVAASTGSAVATASKSNVTSFORRGPRASVT NDSGPRLVSIAGTRPSVRNGQLLVSTGLPALDQLLGGGLAVGT LLIEEDKYNIIYSPLLFKYFLAEGIVNGHTLLVASAKEDPANILQ ELPAPLLDDCKKKEFDEVDVYNHKTPESNIKMKIAWRVQLPKME IGPVSSSRFGHYVDASKRMPQELIEASNNHGFLEPKISSTLKV EPCSLTPGYTKLLQFIQNIIEEGFDGSGNPQKKQRNLRIGIQN LGSPLWGDICCAENGNGNSHSLTKFLYVLRGLLRTSLSACIITM PHTLIQNKAIARVTTLSDVVVGLESFIGSERETNPLYKDYHGL IHRQIPRLNNLICDESVDKDLAFKLKRKLFTIERLHLPPLDSD TVSRSSKMDLAESAKRLGPGCGMMAGGKKHLD |
| 6394 | 1418 | 511 | GAAGGEGARRRPAAMATVMAATAERAVLEBEFRWLLHDEVHA VLKQLQDILKEASLREFTLPGSGTEGPAKQENFILGSCGTDQVKG VLTQGDALSQADVNLKMPNNQLLHFAFREDKQWKLQIQDAR NHVSQAIYLLTSRDQSYQPKTGAEVLKLMDAVMLQLTRARNLT TPATLTLPETIAASGLTRMPALPSPDLLVNVYINLNKLCCLTVYQ LHALQPNSTKNFRPAGGAVLHSPGAMFEWGSQRLEVSHVHKVEC VIPWLNDAVYFTVSLQQLCKDKISVFSSYWSYRPF |
| 6395 | 13 | 658 | PSGRPTRPLCCAARRGAARHGGSVSGWPAGRTPFTETSNPGSSVM ESVTFEDVAVEFIQEWALLDSARRSLCKYRMLDQCRTLASRGTP PCKPSCVSQLQRAEPKATERGILRATGVAVESQLKPEELPSMQ DLLEEASSRDMQMGPGFLRMLVPSIEERETPLTREDRPAEQE PFWSLGCTGLKAAMQIQRVVIVPPTLGHNRNPWVARDSGE |
| 6396 | 1 | 1221 | ANILSSPSKRGQKGTLLIGYSPGEGTFLYNFMGDAFQHSQSIPRF IKESLQKILEESDSRQIFYFLCLNLLFTFVELFYGVLTNSGLLI SDGFHMLFDCSALVMGLFAALMSRWKATRIFSYGYGRIEILSGF INGLFLIVIAFFVFMESVARLIDPELDTHMLTPVSVGGGLIVNL IGICAFSHAHSHAHGASQGSCHSDHSHSHHMHGSHDHGHSH GSAGGGMNANMRGVFLHVLADTLGSGIGVIVSTVLIEQFGWFIAD PLCSLFIALILFSLVPLIKDACQVLLRLPPEYEKELHIALEK IQKIEGLISYRDPHFWRHSASIVAGTIHQVTSVDLEQRIVQQV TGILKLDAGVNNLTIQVEKEAYFQHMSGLSTGFHDVLAMTKQMES MKYCKDGTIIM |
| 6397 | 391 | 122 | GAGGVGRFEAIRAPARMIEVVCNDRLGKKVRVKCNTDDTIGDLK KLIAAQTGTRWNKIVLKKWYTFKDHVSLGDYBIHGMNLELYY |

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|------------|--|--|--|
| 6398 | 353 | 1306 | HKQMGPLINRCKKILLPTTVPFATMRIWLGLGLLPFLLLSLGQ RPTEGSEVAIKIDFDPAFGSDDQYQGCSKVMEKLTOGDYFTK DIEAQKNYFRMWQAHLAWLNQGVLPQNMTTHAVAILFYTLN SNVHSDFTRAMASVARTPQQYERSPHFKYLHYLTSALQLLRKD SIMENGTLCYEVHYRTKDVHFNAVYTGATIRFGQLSTSLKEEA QEFGNQTLFTIPTCLGAPVQYFSLKKEVLIPPYELFKVINMSYH PRGDWQLRSTGNLSTYNCLLKASSKKCIPDPIAIASLSFLT VIIFSKSRV |
| 6399 | 75 | 1245 | PNLETYPGRRCCKDSMNFTPTHPTVCRRKTTVSVKRGVAVSGPTK RRGMADSLSTPLPSPEDRLAKLHPSKELLEYYQKKMAECEAEN EDLLKKLELYKEACEGQHKECDLQOREEEIAELQKALSMDQVC LFQEREHVLRILYSENDRLRIRELEDKKKIQLNLALVGTDAGEVT YFCEKPPHKVTILOKTIQAVGECEQSSESAFKADPKISKRRPSR ERKESSEHYQRDIQTLLIQVEALQAQLEGQTKLSREQIEGLIED RRIHLEEIQVOHQRONQNKIKELTNLHHTQELLYES TKDFLQLR SENQNKESWMLEKDNLMSKIQYRVQCKKEDKIGKVLPMVHE SHHAQSEYIKVMSLCRNEVVYFSGRVEGIPIKNLQFVM |
| 6400 | 2520 | 1053 | KTMKCDEVVYEQSAILRHNCGYAMTKGKFPHNLMERKOFETWL DNISVTFLSLTDLQKNETDLHLISLSAGVQLRHLNNLETTLLKR DPLKLLPLELSFYLLKWLDPOTLTCLLVSKQWNKVISACTIONE QTACKNLGWQIDDSVODALHWKKVYLKAILRMKQLEDHEAFETS SLIGH SARVVALYYKGDLCTGSDDLAKLWDVSTGGCVYGIQT HTCAAVKPFDEQKLVTGSDNTVACWEWSGARTQHFRTGTGAUF SVDYNDLIDLVS GSADPTVKVWALSAGTCCLNTLTGHTIEWTKV VLQCKVKSLHS PGDYILLSADKYEIKNWPIGREINCKCLKTLT SVSEDRSICLQPRHLFDGKYIVCSSALGLYQWDFASYDILRVIK TPETANLALLGFQDI FALLFPDNRVLYIMDLRTESLISRWPLPEY RKSKRGSS FLAGEASWLNGLDGHNDTGLVFATSPMDSITHLVLW KEHG |
| 6401 | 109 | 765 | PGAAWSRPDLRGCGTGPAPALRMLVLPSPCPQPLAFSSSVETMEG PPRRTCSPPEPGPSSSIGSPQASSPPRNHYLLIDTQGVFPYTVL VDESQREPAGSAGAPGQKKCYSCPVCSRVEFMYSYLQRHSITHS EVKPFECDCGKAFKRASHLARHHSIHLAGGGRPHGCPICPRRF RDAGELAQRSVRHSGBRFPQCPCPRRFEQNTLQKHTRWKHP |
| 6402 | 1196 | 279 | TTSQCGGITQSSAIFVASMFAAICLRNALLLLPEEQDPKQEN GAKNSNLGGNTESSESSETCSSKSHDGDKFIAPPSSPLRKQE LENLKCSILACSAYVALAGDNLMALNHADKLLQPKLSGSLKF LGHLIYAABALISLDRI SDAITLNPENVTDVSLGISSENEQDQGS DKGENEAMESGKRAPQCYPPSSVNSARTVMLFNLSAYCLRSEY DKARKCLHQASMIHPKEVPEPAILLAVYLELQNGNTQLALQII KRNQLLPAVKTHSEVRKKPVFPVHIQPIQMPAFFTTVQRK |
| 6403 | 2 | 1690 | RGIHTSVLQGNLQNMYSHNVVIMNLLNLTOVQQRNLITNLQ RSVDDTSQAIRIKNDFONLQQVFLQAKKOTDWLKEKVQSLQTL AANNALAKANNDTLEDMSQLNSFTGQMENNITTISQANEQNLK DLQDLHKDAENRTAIKFNQLEERFQLFETDIVNIISNISYTAHH LRTLSTNLNEVRTTCTDTLTKHTDDLTSLNNTLANIRLDSVSLR MQQDLMRSLDTEVANLSVIMEEMKLVD SKHGQLIKNFILQGP PGPRGPRGDRGSQGPPTGNKGQKEGKEBPGPPGAGERGPIG PAGPPGERGGKSGKSQGP KGSRGSPGKPGPQGPSGDPGPPGPP GKEGLPGPQGP PPFGQLQGT VGEPPGVGPRGLPLPGVPGMPGP KGPPGPPGSGAVVPLALQNEPT PAPEDNSCPPHWKNFTDKCY FSVEKEIFEDA KLFCEDKSSH LVFINTREEQQWIKKQMVGRESH WIGLTD SERENEWKWDGTS PDYKNWKAQPDNWGHGHGPGEDC AGLIYAGQWDFQCEDVNFFICEKDRETVLSSAL |
| 6404 | 1012 | 222 | AAALAMAAFAPGLISVFSSSQBLGAALAQLVAQRAACCLAGARA |

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|------------|--|--|--|
| | | | RFALGLSGGSLVSMRLARELPAAVAPAGPASLARWTLGFCDERLV PFDHAESTYGLYRTHLLSRLPIPEQVITINPELPVEEAEDYA KKLRQAFQGDSPVFDLLILGVGPDGHTCSLFPDHPPLQEREKI VAPISDSPKPPQVRVTLTLPVLNAARTVIFVATGEGKAVALKRI LEDQEENPLPAALVQPHGTGKLCWFLDEAAARLLTVPEKHSPIL |
| 6405 | 1 | 1456 | AALPRPTPRAPLREGTGSDEMAASMFYGRVAVATLRNHRPR TAQRAAAQVLGSSGLFNNHGLQVQQQQQNNLSLHEYMSMELLQE AGVSVPKGYVAKSPDEAYALAKKLGSKDVIKAQVLAGGRGKGT FESGLKGGVKIVFSPPEAKAVSSQMIGKKLFTKQTGEKGRICNQ VLVCERKYPREYYPATMERSFQGPVLIGSSHGGVNIEDVAAE TPEAIKEPIDIEEGIKKEQALQLAQKMGFPNNIVESAAENMVK LYSLFLKYDATMIEINPMVEDSDGAVLCMDAKINFDSNSAYRQK KIFDLQDWTQEDERDKDAKANLNYIGLDGNIGCLVNGAGLAMA TMDIILKHGGTPANFLDVGGGATVHQVTEAFKLITSDKKVLAIL VNIFGGIMRCDVIAQGIWMAVKDLEIKIPVVVRLQGTRVDDAKA LIADSGKLKILACDDLEAARMVVKLSEIVTLAKQAHVDVKQLP I |
| 6406 | 1036 | 167 | HPRQMRGEDTPEAPPYSSGRYDSIKTEVSGCPEDLTVGRAPTAD DDDDHDDHEDNDKMNDSSEGMDPERLKAFNMFVRLFVDENLDRM VPISKQPKKIQAIIESCSRQFPPEQERARKRIRTYLKSRRMK KNGMEMTRPTPPHITSAMAENILAAACESETRKAARKMRLEIYQ SSQDEPIALDKQHSRDSAATHSTYSLPASSYSQDPVYANGGLN YSYRGYGALSSNLQPPASLQTNHNSGESGEARALASRPAPSWV CRAALGSGMGRGKQRPVMERGCLTA |
| 6407 | 492 | 150 | VGLCLAVSQTVLAQLDALLVFPQVQVAQLSCTLSPOHVTTIRDYGV SWYQQRAGSAPRYLLYYRSEEDHHRPADIPDRFSAKDEAHNAC VLTISFPVQPEDDADYYCSVGYGFSP |
| 6408 | 1458 | 903 | RGCITSSQAWRLFGGVTRGFNMRIKCYFCSGPIYPGHGMMFVR NDCKVFRFCKSKCHKNFKKRNPRKVRWTKAFRKAAGKELTVDN SFEFEKRRNEPIKYQRELWNKTIDAMKRVEEIKQKRQAKFIMNR LKKNKELQKVQDIKEVKQNIHLIRAPLAGKQKQLEEKMVQQLQE DVDMEDAP |
| 6409 | 150 | 446 | NTALANLLRCFTCDRLCGGCTAPAPPAHQGIVLQPMVPSCDPGP GPACLPKTKTFRSYLPRCHRTYSCVHCRAHLAKHDELISKSFQGS HGRAYLFNSV |
| 6410 | 85 | 607 | RGGTAGCVACLCWGCSSSPKAAFPAGSACLPAADSCPCLLFQAC AISGLFNCITIHPLNIAAGVWMIMNAFILLCEAPFCQFIEFA NTVAEKVDRLRSWQKAVFYCGMAVVPVIVISLTLTLLGNAIAPA TGVLYGLSALGKKGDASISYARIQQQRQQADEEKLAEETLEGEL |
| 6411 | 302 | 772 | RLSIMASSLNEDPEGSRITYVKGDLFACPKTDSLACISEDCRM GAGIAVLFFKKKFGGVQELLNQKKSGEAVLKRDRYIYYLITK KRASHKPTYENLQKSLKAMKSHCLKNGVTDLSMPRIGCGDLRLQ WENVSAMIEEVFEATDIKITVYTL |
| 6412 | 61 | 1709 | RPVTSFSPPLPGSCGRLGTRTMLGRSLREVSAAKQGGITPTEL CQKCLSLIKKTKFLNAYITVSEEVALKQAESEKRYKNGQSLGD LDGIPIAVKDNFSTSGIETTCAENMLKGYIPPNATVVQKLLDQ GALLMGKTNLDEFAMGSGSTDGVEGPKVKNPWSYKQYREKRKQN PHSENEEDSWLITGGSSGSAAVSAFTCYAALGSDTGGSTRNP AAHCGLVGPKPSYGLVSRHGLIPLVNSMDVPGILTRCVDAAIV LGALAGDPDRDSTTVHEPINKPFMLPSLADVSKLCIGIPKEYLV PELSSEVQSLWSKAADLFESEGAKEVIEVSLPHTSYSIVCYHVL TSEVASNMARFDGLQYGHRCIDVSTEAMYAATRREGFNDVVRG RILSGNFFLLKENYENYFVKAQKVRRLIANDFVNANFNSGVVDVLL TPTTLSEAVPYLEFIKEDNRTSAQDDIFTQAVNMAGLPAVSI VALSNQGLPIGLQFIGRAFCQQLLTVAKWFEKQVQFPVQLQE LMDDCSAVLENEKLASVSLKQ |

501

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|------------|--|--|---|
| | | | FAPMYGGFPVKLRITLGDPIPYDQPITAEELAEKTKNAVQALID KHQRIPGNIMSALLERFH |
| 6421 | 1844 | 362 | WALSLRRQPERMSNKLSPHPSVVLRSSEFKMASSPAVLRASRL YQWSLKSSAQFLGSPQLRQVGQIIRVPARMAATLILEPAGRCWC DEPVRIAVRGLAPEQPVTLRASLRDEKGALEFQAHARYRADTLGE LDLERAPALGGSFAGLEPMGLLWALEPEKPLVRLVKRDVRTPLA VELEVLDGHDPPGRLLCQTRHERYFLPPGVRREPVRVGRVGRGT LFLPPEPGFPFPGIVDMFGTGGGLLEYRASLLAGKGFVAMALAY NYEDLPKTMETLHLEVFEEMNYLLSHPEVKGPVGLLGISKGG ELCLSMASFLKGITAAVVINGSVANVGGTLRYKGETLPPVGVNR NRIKVTGDYADIVDLNLSLEGGPDQKSFIPVERAESTFLFLVG QDDHNWKSEFYANEACKRLQAHGRKPKQIICYPETGHIYIEPPYF PLCRASLHALVGSPIIWGGEPRAHAMAQVDANKQLQTFHKLHG GREGTIPSKV |
| 6422 | 181 | 2133 | EGENLSWFQEFWGDIAKEFYWKTPCPGPFRLYNFDVTGKIFIE WMKGATTNICYNVLDNRNVHEKKLGDKVAFYWEGNEPGETTQITY HQLLVQVCQFSNVLRKQGIHKGDRVAIYMPMIPELVVAMLACAR IGALHSIVFAGFSSESLECRILDSSCSLLITTDAYRGEKLVNL KELADEALQKCKEKGFPVRCCIIVKHLGRABLGMGDSTSQSPPI KRSCPDVQISWNQIDLWHELMQEAAGDECEPEWCDADPLFIL YTSGSTGKPKGVVHTVGGYMLYVATTFKYVPDFHAEDVFWCTAD IGWITGHSYVTYGELANGATSVLFEGIPTYPDVNRLWSIVDKYK VTKFYTAPTAIRLLMKFGDEPVTKHSRASLQVLGTVGEPINPEA WLWYHRVVGARCPIDVTFWQETGGMHMLTLPGLATPMKPGSAT PFFFGVAPAILNESGEELEGEAEGYLVEFKQWPWPGIMRTVYGNHR RPETTYFKKPPGYVVTGDGCQRDQDGYWITGRIDMLNVSGHL LSTAEVESALVEHEAFAAFAAVVGHPPVKGECLYCFVTLCDGHT FSPKLTEELKKQIREKIGPIATPDYIQNAPGLPKTRSGKIMRRV LRKIAQNDHDLGDMSTVADPSVISHLFSHRCLTIQ |
| 6423 | 614 | 1237 | ANLKEIPRDLPPETVLLVLDNSQITSIPNEIFKDLHQLRVLNLS KNGIEFIDEHAFKGVATLQTLDLSDNRIQSVHKNFNNLAKARA RIANNPWCHDCTLQOVLRSMAHNETAHNVI CKTSVLDEHAGRP FLNAANDADLCNLPKKTTDYAMLVTMFGWFTMVISYVVYVRQN QEDARRHLEYLKLSPSRQKKADEPDISTVV |
| 6424 | 1 | 1188 | KKVSWPVAAMVHCSCVLFERKYNFIDKRLFLTRGGSGMGYPRL GEGGKGGDVVVVAHNRMTLKQLKDRYPRKRFVAGVGANSKISA LKSGSKGKDWEIFPVFVGSVTDENGKIIGELNKENDRILVAQGG GGKLLTNFLPLKGQKRIIHLDLKLIADVGLVGFNAGKSSLLSC VSHAKPAIADYAFTTLKPELGKIMYSDFKQISVADLPGLIEGAH MNKGMGHKFLKHIERTRQLLFVVDISGFQLSSHTQYRTAFETII LLTKELELYKEELQTKPALLAVNKMMDLPDAQDKFHELMSQLQNP KDFLHLFEKNMIPERTVEFQHIIPISAVTGEIEELKNCIRKSL DEQANQENDALHKKQLLNLIWISDTMSSTEPPSKHAVITTSKMDI I |
| 6425 | 1850 | 1144 | LAMEGGGGIPLLETLKEESQSRHVLPAFSEVNSLQKSNWGFLLTG LVGGTLVAVYAVATPFVTPALRKVCLPFVPATMKQIENVVKMLR CRGSLVDIGSGDGRIVIAAAKKGFTAVGYELNPVLVWYSRYRA WREGVHGSAKFYISDLWKVTFQSQSNVVI FGVPMMLQLEKKLE RELEDDARVIACRFPFPHWTPDHVTGEGIDTVWAYDASTFRGRE KRPCTSMHFPQLPIQA |
| 6426 | 30 | 565 | SRGAAVGGMSVAGGEIRGDTGGEDTAAFGFRFSFSPEPTLEDIRR LHAFFAAERDWEQFHQPRNLLALVGEVGLAEFLQWKTDGEPG PQGWSPRERAAALQEELSDVLIYVLAARCRVDLPLAVLSKMDI NRRRYPAHLARSSSRKYTELPHGAISEDQAVGPADIPCDSTGQT ST |
| 6427 | 145 | 959 | AASWGPVPHVPKAGKMVSWMICRLVVLVFGMLCPAYASYKAVKTK NIREXVRMMYIWFALFMAAEIVTDIFISWFFPYEIKMAFVL |

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|------------------|---|--|--|
| | | | WLLSPYTKGASLLYRKFFVHPSLSRHEKEIDAYIVQAKERSYETV LSFGKRGLNIAASAQVQATKSGQALAGRLRSFSMQDLRSISDA PAPAYHDPYLEDQVSHRRPPIGYRAGGLQSDTEDECWSDTEA VPRAPARPREKPLIRSQSLRVVVRKPPVREGTSRSLKVRTRKKT VPSDVDS |
| 6428 | 1982 | 444 | SGSGGKMEDHQHVPIDITQTSKLLDWLVDRRHCSLKWQSLVLTIR EKINAAIQDMPESSEBIAQLLSSGYIHYFCHLRILDLKGTAST KNIFGRYSSQRMKDWQEI IALYKDNITLVLSLLVRNVNVEI PSLKQIAKCOQLQOEYSRKEECQAGAAEMREQFVHSCQYGI TGENVRGELLALVKDLPSQLAEIGAAAQQLGEAIDVYQASVGF VCESPTQVLPMRFVQKRGNTVYEWRTGTETPSVVERPHLEEL BEQVAEDAIDWGDGFEAVSEGTDSGISAEAGIDWGFPESDS KDPGGDGIDWGDVAVALQITVLEAGTQAEQVARGPDALTLEY TETRNLQFLDELMELEIFLAQRAVELSEADVLVSQFQLAPAIL QGQTKKMTVMVSVLEDLIGKLTSLQLQHLFMILASPRYVDRVT EFLQQLKQSQLLALKKELMVQKQQAEEQAALPEKLLDLLEK TKELQKLIEADISKRYSGRPVNLMTSL |
| 6429 | 3413 | 3442 | EPSSWTAAPRGPLAAHPLEAAVQEDDRRLSFDRIKVFANGTL VVKSVTDKADGDLVARNKVGDDYVVLKVDVVMKPAKIEHKKE NDHKVFYGGDLKVDCAVATGLPNPEISWSLPGSLVNSFMQSDDS GGRTKRYVFNNGTLVFNVEGMREEDYTCAENQVKGKDEMRVR VKVVTAPATIRNKTCLAVQVPYGDVVTVACEAKGEPMPKVTWLS PTNKVIPSSEKYQIYQDGTLLIQAKQRSDSGNYTCLVRNSAGE DRKTVMIHVNQPPKINGNPNPITTVREIAAGSGRKLIDCKAEG IPTPRVLWAPPEGVLPAPYGNRITVHNGSLDIRSLRKSQSDV QLVCMARNEGGEARLIVQLTVLEPMEKPIFHDPISEKITAMAGH TISLNCASAGTPTPSLVVLPNGTDLQSGQQLQRFYHKADGMLH ISGLSSVDAGAYRCVARNAAGHTERLVSLLKVLKPEANKQYHNL VSIINGETLKLPCPTPPGAGQGRFSWTLPNGMHLEGPQTLGRVSL LNGTLTVREASVFDRTGYVCRMETEYGPSVTSIPVIVIAVPPR ITSEPTPVITYTRPGNTVKNLNCMAMGIPKADITWELPKSHLKAG VQARLYGNRFLHPQGSLLTIQHATQORDAGFYCKMAKNILGSDSKT TYIHVF |
| 6430 | 1946 | 602 | RTRVSTGLRRTLLWSEAVGASSTRGDTGIPGSGEGGAGPGGGEG AMLEAMAEPSPEDPPPTLKPETQPPKRRRTIEDFNKFCSEFVLA YAGYIPPSKEESDWPASGSSPLRGESAADSDGWDAPSDDLRTI QTFVKKAKSSKRRAAQAGPTQPGPPRSTFSRLQAPDSATLEKLM KLKDSLFDLDGPKVASPLSPTSLSLTHTSRPPAALTVPVLSQGDLS HPPRKKDRKNRKLPGAGAGFVLRPRPTPGDGEKRSRIKSK KRKLKKAERGDRLLPPGPPQAPPSTDSSEEEEEEEEEEEEMA TVVGGAPVPVLPPTPEAPRPPATVHPGVPPADSESKVGSTE TSQGDASSSEGEEMRVMDIEDIMESGDDSDWDLITCYCRKPPAGR PMIECSLCGTWIHLSCAKIKKTNVPDFCYCKCKELRPEARLGG GPPKSGEP |
| 6431 | 3 | 605 | WNNSSYNLPAYAPYLPCEACAMQDGRKGGAYAGKMEATTAGVGR LEEEALRRKERLALREKTGRKDKEDGEPKTKHLREEEEBGEKH RELRLRNYVPEDEDLKKRRVPQAKPVAVEEKVKQLEAAKPEPV IEEVDLANLAPRKPDWDLKRDVAKKLEKLKRTQRAIAELIRER LKGQEDSLASAVDAATEQKTCDS |
| 6432 | 56 | 1692 | GGLGTMGSRICKQNPETTFEVYVEVAYPRTGGTSLSDPEVQRQFPE DYSQEVLTQLTKFCFFYVDSLTVSQVGNFTFVLTDIDSKQR FGFCRLSSGAKSCFCILSYLPWFVEVYKLLNILADYTTKRQENQ WNELETLHLKLPIDPGVSVHLSVHSYFTVPDTRLPSPENRN LTEYFVAVDVNNMLHLVSMYERRILII CSKLSLTLTACIHGSA AMLYPMYQHVYIPVLPPLLDYCCAPMPYLIGIHLSLMEKVRN MALDDVVILNVDNTLETFFDDLQSLPNDVLISSLKNRLKKVSTT |

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|------------|--|--|--|
| | | | TGDGVARAFLKAQAFFGSGYRNALKIEPEEPITFCSEAFVSHYR SGAMRQFLQATQLQLFKQFIDGRDLNLSGEGFSDVFEEINM GBYAGSDKLYHQWLSTVRKSGAILNTVTKANPAMKTIVYKFDI AENGCAPTPEEQPKTAPSPLEAKDPKLREDRRPITVHFGQVR PPRPHVVKRPKSNIAVEGRRTSVSPSEQNTIATPATLHLQKSI THFAAKFPTRGWTSSSH |
| 6433 | 1524 | 484 | APVTKRKEVFAKDSKGSALDAGRDPKRPALPETLCESGWASNTA PTTPQPGWCLCGKDFKSSCQTPGREKERRLATMHGSCSFLMLL LEPLLLLVATTGPVGALTDEEKRLMVELHNLRYAQVSPASDML HMRWDEELAAFAKAYARQCVWGHNKERRRGENLFAITDEGMDV PLAMEEWHHEREHYNLSAATCSFGQMGHYTQVVWAKTERIGCG SHFCEKLQVEETNIELLVCNVEPPGNVKGKRPYQEGTPCSQCP SGYHCKNSLCEPIGSPEDAQDLPLYLVTEAPSFRAEASDSRKM AEGDPKPSVVSGLNSGPGHVWGPGLLGLLLPFLVLGIF |
| 6434 | 40 | 2002 | MPQLNFGMADPTQMGGLSMLLAGEHALGTPEVFSGTCRPPDVE SPELRQKSPFLQFAEISSSTSHSDASTKQCOTSAFQFAEISSN TSQLGGAEPVKRCGKSALFLAEMCLASEGMKMEESKLKAKES DGGRIKELEKGEKEKEIKMEKTDETRLQKEAEFEKSARENLRDS KELRNFEALQIDIMAIKMEDPKEIRKEELEEDHKCSHFPDFSY SASSKIIISDVPSRKDHMCHPHGIMIIEDPAALNKPELKKKKK KSKMDRHGNDKSTPKKTKCKRQSSSESDIESVIYIEAVAKGDWG IEKLODTPRKKVRTSSSGKGSILDAKPPKKKVKRSREKMSKEKS SDTTKESRPPDFISISASKNISGETPEGIKAEPLTPMEDALPPS LSGQAKPEDSDCHRIETCGSRKRSERCKGALYKTLVSEGMLTS LRANVDRGKRSSGKGNSSDHEGCVNEESWTFQSQSGTSKSKPKK TKPKEDCLLGSAKLDEEFKFKFNSLPQYSPVTFDRKCVVPVPRKK KKTGNVSSEPTKTSKSGSGDKWSNQLFLDAIHTEAIFSEDRNT MEPVHKVNIPISIFINTPEPTTARTFGGQPKESKENPDYSPCQ DQORAGYHHEEVLWMTNLMNCCGGVYLKQLRHTAMTNA |
| 6435 | 2227 | 657 | ALQRDAAAAYAHPEYERFLQEETVSQQINSELLQTRPLALPE VVKSORPLQRQVHLRGRPASOPTVIRGITYYKAKVSEENDIEE QQDEFFSGDNGVDLLIEDQLLRHGLMTSVTRRPAATRQGHSTA VTSDLNARTAPWSSALPQSTSDPSIANHASVGPTLQTTGVSVD PTRESVLQSPQVPATTVAHTATQQAAPAPPVSPREALMEAM HTVPVPPTTVRTDSLGDAPAGRGTTPASPTLSPEEEDDIRNVI GRCKDTLSTITGPTTQNTYGRNEGAWMKDPLAKDERIYVTNYYY GNTLVEFRNLNENFKQGRWSNSYKLPYSWIGTHGVVYNGAFYYNR APTRNIIKYDLKQRYVAAWAMLHDVAEEATPWRWQGHSDVDFA VDENGLWLIYPALDDEGFSQEVIVLSKLNADISTQKETTWRTG LRRNFYGNCFVICGVLYAVDSYNQRNANISYAFDTHNTQIVPR LLFENEYFYTQIDYNPKDRLLYAWDNGHQVTYHVFAY |
| 6436 | 1295 | 341 | GACRPPVRQDPDSDGPDYEALPAGATVTTHMVAGAVAGILEHCV YPIDCVKTRMQSLQPDPAARYRNVEALWRIIRTEGLWRPMPGL NVTATGAGPAHALYFACYEKLKKTLSDVHHPGGNSHIANGAAGC VATLLHDAAMNPAEVVKQRMQMYNSPYHRVTDVRAVWQNEGAG AFYRSYTTQLTMNVFQAIFHMTYEFLEQEHFNPPRRYNSPSSHL SGACAGAVAAAATTPLDVCKTLNLTQESIALNSHITGHITGMAS AFRTVYQVGVTAYFRGVQARVIYQIPSTAIAWSVYEFFKYLIT KRQEEWRAGK |
| 6437 | 1828 | 360 | PPAPAPPASPARHVTRTARGHLEGGSRAPPLQAVFLQIKNMVK LIHTLADHGDDVNCCAFSFSLLATCSLDKTIIRLYSLRDFTELP SPLKFHTYAVHCCCFSPSGHILASCSITGLVWNTENGQMLAV MEQPSGSPVRVCQFSPDSTCLASGAADGTVVLWNAQSYKLYRCG SVKDGSLAACAFSPNGSFFVTGSSCGDLTVWDDKMRCLHSEKAH DLGITCCDFSSQPVSDGEQGLQFFRLASCQDQCVKIWIVSFTH ILGFELKYSTLSGHCAPVLACAFSHDQMLVSGSVDKSVIVYD |

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|------------|--|--|--|
| | | | TNTENILHTLTQHTRYVTTCAFPNTLLLATGSMKDTVNIWQFD LETLCQARSTEHQLKQFTEDWSEEDVSTWLCQAQDLKDLVGIKFM NNIDGKELLNLTKEIADDLKIESLGLRSKVLKIEELRTKVKLS LSSGIPDEFICPITRELMKDPVIASDGYSEKEAMENWDPAKRN RTSP |
| 6438 | 109 | 901 | EVQILRAKMFQTGGLIVFYGLLAQTMAQFGGLPVPLDQTLPLNV NPALPLSPTGLAGSLTNALSNGLLGGGLGILENLPLLDILKPG GGTSGGLLGGLLGKVTSPVPLNNIIDIKVTDPQLLELGLVQSP DGHRLYVTIPLGIKLQVNTPLVGASLLRLAVKLDITAEILAVRD KQERIHVLVDCTHSPGSLQISLLDGLGPLPIQGLLDSLTGILN KVLPELVQGNVCPVNEVLRGLDITLVHDIVNMLIHGLQFVIKV SIQTASAITTEMASQSQGIQQLLQAEKRAAEKVADARKRKARL KQAKEBAQMEVEQYRREREHEFQSKQAAMGSQGNLSAEVEQAT RRQVGQMSSQQRNRERVLAAQLGMVCDVRPQVHPNYRISA |
| 6439 | 23 | 412 | RARWNSDMGDLPLGLVRLSIALRIQPNDDGVFYKVDGQRFQGNRT IKLITGSSYKVEVKIKPSTLQVENISIGGLVPLLEKSKPEPDG RVVYTGTVDTGVTPTKSGERQPIQITMPFTDIGTFETVWQVKF VNYHKRDHCQWGSPPFSVIEYECKPNETRSLMWVKNESFL |
| 6440 | 3 | 517 | KSGGLRRRQRPGRSAAVGEEELPFGMEKFKAAMLGSSVGDALGY RNVCKENSTVGMKIQBELQSRGGLDHLVLSFGENPVSDNTIMHI ATAEALTTDYWCDDLREYMRVCYVEIVEKLPERRPDPATIEGC AQLKPNNYLLAWHTPFNEKSGSGFGAATKAMCIGLRYNKPERLET LIEVSVECGRMTHNHTGFLGSLCTALFVSFAAQGKPLVQWGRD MLRAVPLAEYCRKTIIRHTAEYQEHWFYFEAKWQFYLEERKISK DSENKAIFFDNVDAEEREKTYRKWSSEGRGRRGHADAPMIAYDA LLAAGNSWTELCHRAMFHGGESAATGTIAGCLFGLLYGLDLVPK GLYQDLEDKEKLEDLGAALYRLSTEEK |
| 6442 | 34 | 796 | AEDPAGGLAGQDTMFARGLRKRCVGHEDVEGALAGLKTVSSYS LQOQSLDMSLVKLQLCHMLVEPNLCRSVLIAINTVRQIQEEMTQ DGTWRTVAPQAAERAPLDRLVSTELCRAAWGQEGAHPASGLGD GHTQGPVSDLCPVTSQAAPRHLQSSAWEMDGPENRGSFHKSLD QIFETLETKNPSCMEELFSDVDSPPYDLDTVLTGMMGGARPGPC EGLEGLAPATPGPSSCKSDLGELDHVVEILVET |
| 6443 | 2 | 555 | MASPAASSVRPPRPKKEPQTLVVPKNAEEQKLLERLMKNFDPK AVPIPEKMSEWAPRPPEFVRDVMSSAGAGSGEFHVRHLRRR EYQRQDYMDAMAEKQKLDAEFQKRLKKNKIAAEEQTAKRRKKRQ KLKEKLLAKMKLEQKKQEGPGQPKQEGSSSSAEASGTEEBEE VPSFTMGR |
| 6444 | 390 | 899 | GSTPRGKMRAPIEPKPGDLIEIFRPFYRHNAIYVGDGYVVHLA PFSEVAGAGAASVMSALTDKAIYVKELLYDVAGSDKYQVNNKHD DKYSPLPCSKIIQRAEELVGQEVLYKLTSENCEHFVNELRYGVA RSDQVRDVI IAAVAGMGLAAMSLIGVMFSRNRKQKQ |
| 6445 | 2 | 753 | AGAAGAAGAARSPPQARTKGVRLPSRRRSPDCGRMELAAAGSF SEEQFWEACAEALQPALAGADWQLLVETSGISITRLLDKKTGLY EYKVFGLVEDCSPITLLADIYMSDYPKQWQYVKELEYEQECNGE TVVYWEVKYPPMSNRDYVYLRQRRLDMGRKIHVILARSTSM PQLGERSGVIRVKYKQSLAIESDGKKGSKVFMYYFDNPGGQIP SWLINWAAKNGVNFLLKDMARACQNYLKKT |
| 6446 | 1 | 1651 | RCPTRSPPPDTPGSRGTTAMCSLASGATGGRGAVENEEDLPELS DSGDEAAWEDEDDADLPHGKQQTCLFCNRLFTSAEETFHCKS EHQFNIDSMVHKHGLEFYGYIKLINIRLKNPTVEYMNSIYNPV PWEKEEYLPVLEDDLLQFDVEDLYEPVSVFSSYPNGLSENTS VVEKLLHMEARALSAEALARAREDLQMKQFAQDFVMTDVRT CSSSTSVIADLQEDGQVYFSSYGHYGIHEMLKDKIRTESYRD FIYQNPFIKDKVVLVVGCGTGILSMFAAKAGAKKVLGVQDQSEI |

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|------------|--|--|--|
| | | | LYQAMDITRLNKLEDTITLIKGIIEVHLPVEKVDVITSEWMGY FLLFESMLDSVLYAKNKYLAKGGSVYPDICTISLVAVSDVNKHA DRIAFWDDVYGFKMSCKKAVIPEAVVEVLDPKTLISEPCGKIH IDCHTTSISDLEFSSDFTLKITRTSMCTAIAGYFDIYFEKNCHN RVVFSTGPGSTKTHWKQTVFLEKPFPSVKAGEALKGKVTVHKNK KDRSLTTLTLNNSQTQYGLQ |
| 6447 | 1554 | 1068 | RLGPAEWHLSGPGCHATLGAANRGRALGVRAAWRGAPLCQVMMF SRTNLATGIPSSKVKYSRLSSTDDGYIDLQFKKTPPKIPYKAIA LATVFLIGAFLLIIGSLLSGYISKGGADRAVPVLIIGILVFL PGFYHLRIAYVASKGYRGYSYDDIPDFDD |
| 6448 | 74 | 559 | GQVLSHCYHYRSSRRRGGLSRGRGAGVMALVPYEETTEFGLQK FHKPLATFSFANHTIQIRQDWRHLGVAAVVWDAIVLSTYLEMG AVELRGRSAVELGAGTGLVGIVAALLACRIRYERDNNFLAMLER QFIVRVHYDPEKDVHIYEAKRKNQKEDL |
| 6449 | 597 | 1876 | EYGVCCNLRKLEITGVSCRDVYAKLLHRYRHILGLWQPDIGPYG GLLNVDVVDGLFIIGWMLPPHDPHVDDPMRFKPLFRIHLMERKA ATVECMYGHKGPHHGHIIQIVKDEFSTKCNQTDHHRMSSGGRQEE FRTWLREEWGRTLEDIFHEHMQELILMKFIYTSQYDNCCLTYRRI YLPSPRPDDLKPLGFKGTYSHGLEIVMLSFGHRRARGTKITG DPNIPAGQQTVEIDLHRRIQLPDLENQRFNLSRIVLEVRERV RQEQEGGHEAGEGRGRQGPRESQPSAPQRAEAPSKGPDGTPG EDGGEFGDAVAAABQPAQCGQGPFFVLPVGVSSRNEDYPRTCRM CFYGTGLIAGHGFTSPERTPGVFILFDEDRFGFVWLELKSFSLY SRVQATFRNADAPSPQAFDEMLKNIQSLTS |
| 6450 | 848 | 269 | FVPAFRTVSGKRSLFGEWEERGEQRTGREGSGNGGRAVEAAR MRLLCGLWLWLSLLKVLQAQTPPLPLPPMQSFQGNQFQGEWF VLGLAGNSFRPEHRALLNAFTATFELSDDGRFVWNAMTRGQHC DTWSYVLIIPAAQPGQFTVDHRVWTHEQAGRPQDQPAQQLVAAS RDAGPVHLEPGQSSGGLG |
| 6451 | 232 | 939 | HSPTPTPTSEFRATMEDVKLEFFSLPQCKEDAEWYTPMRREMGE YLPGLFLGPYSSAMKSLPVLQKHGITHIICIRQNTIENFIKPN FQQLFRYLVDIADNPVENIIRFFPMTEKFEIDGSLQMGKVLVH GNAGISRSAAFIAYIMETFGMKYRDAFAYVQERRFCINPNAGF VHQLQEYEAIIYAKLTIQMMSPLQIERSLSVHSGTTGSLKRTHE EEDDFGTMQVATAQNG |
| 6452 | 1 | 652 | RTRGESSNMEPLAAYPLKCSGPRAKVFVALLSIVLCTVTLFLLO LKFLPKPKINSFYAFEVKDAKGRVTSLKYKGVSVLVNVASDCQ LTDNRNVLGLKELHKEFGPSHFSLVLAFCNQFGESEPRPSKEVES FARKNYGVTFPIPHKIKILGSEGEPAFRFLVDSSKKEPRWNFWK YLVNPEGQVVKFWRPEEPIEVIREPIAALVRQVIIKKKEDL |
| 6453 | 827 | 223 | HRRWLPGLSMPRTTLPRPLSLCLSLCLCLAAALGSAQSGSC RDKKNCKVVSQQLRKRLTPLQYHVTOEKGTESAFEGEYTHHK DPGIYKCVVCGTPLFKSETKFDGSGGWPSFHDVINSEAITFTDD FSYGMHRVETSCSQCGAHLGHIFFDDGPRPTGKRYCINSAALSFT PADSSGTAEGSGVASPAQADKAEL |
| 6454 | 827 | 223 | HRRWLPGLSMPRTTLPRPLSLCLSLCLCLAAALGSAQSGSC RDKKNCKVVSQQLRKRLTPLQYHVTOEKGTESAFEGEYTHHK DPGIYKCVVCGTPLFKSETKFDGSGGWPSFHDVINSEAITFTDD FSYGMHRVETSCSQCGAHLGHIFFDDGPRPTGKRYCINSAALSFT PADSSGTAEGSGVASPAQADKAEL |
| 6455 | 1042 | 173 | RVHLATVSASAAWDALGLPVRSHMQSGSTRMGVMTDVHRRFLQL LMTHGVLLEWDVKRLQTHCYKVHNRNATVDKLEDFINNINSVLE SLYIEIKRGVTEDDGRPIYALVNLATTSISKMATDFAENELDLF RKALELIIDSETGFASSTNINLVDLKGGKMRKKEAQVLQKF VQNKWLEKEGEFTLHGRAILEMEQYIRETYPDAVKICNICHSL |

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|------------|--|--|--|
| | | | LIQQQSCBCTCGIRMHLPVAKYFQSNAPRCPCNDYWPHEIPK VFDPEKERESGVLKSNKKSLRSRQH |
| 6456 | 2 | 555 | RPQSRISIMWRNSLLQVSSGLRWLRVCAMVDILGERHLVTCGKA TVEAEALQNKVVALYFAAARCAPSRDFTPLLCDFYTALVAEAR RPAPFEVVFVSADGSSQEMLDPMRELHGAWLALPFHDPPYRHELK KRYNVTAI PKLVIVKQNGEVITNKGKQIRERGLACFQDWEAA DIFQNFVS |
| 6457 | 23 | 892 | PTTGFPVNTNFPWNWPDGKPPIMILYVSKLNKIIHFDFDKKIPV KLFPLPLLYVGNHISGLSSTSKLSLPMFTVLRKFTIPLTLLET IILGKQYSLNIILSVFAIILGAFIAAGSDLAFLNLEGYIFVFLND IFTAANGVYTKQKMDPKELGKYGVLFYNACFMIIPTLIISVSTG DLQQATEFNQWKNVVFILQFLLSCFLGFLMYSTVLCSYYNSAL TTAVVGAIKNVSVAYIGILIGGDYIFSLNLFVGLNICMAGGLRY SFLTLLSSQLKPKPVGEENICLDLKS |
| 6458 | 23 | 892 | PTTGFPVNTNFPWNWPDGKPPIMILYVSKLNKIIHFDFDKKIPV KLFPLPLLYVGNHISGLSSTSKLSLPMFTVLRKFTIPLTLLET IILGKQYSLNIILSVFAIILGAFIAAGSDLAFLNLEGYIFVFLND IFTAANGVYTKQKMDPKELGKYGVLFYNACFMIIPTLIISVSTG DLQQATEFNQWKNVVFILQFLLSCFLGFLMYSTVLCSYYNSAL TTAVVGAIKNVSVAYIGILIGGDYIFSLNLFVGLNICMAGGLRY SFLTLLSSQLKPKPVGEENICLDLKS |
| 6459 | 23 | 892 | PTTGFPVNTNFPWNWPDGKPPIMILYVSKLNKIIHFDFDKKIPV KLFPLPLLYVGNHISGLSSTSKLSLPMFTVLRKFTIPLTLLET IILGKQYSLNIILSVFAIILGAFIAAGSDLAFLNLEGYIFVFLND IFTAANGVYTKQKMDPKELGKYGVLFYNACFMIIPTLIISVSTG DLQQATEFNQWKNVVFILQFLLSCFLGFLMYSTVLCSYYNSAL TTAVVGAIKNVSVAYIGILIGGDYIFSLNLFVGLNICMAGGLRY SFLTLLSSQLKPKPVGEENICLDLKS |
| 6460 | 23 | 892 | PTTGFPVNTNFPWNWPDGKPPIMILYVSKLNKIIHFDFDKKIPV KLFPLPLLYVGNHISGLSSTSKLSLPMFTVLRKFTIPLTLLET IILGKQYSLNIILSVFAIILGAFIAAGSDLAFLNLEGYIFVFLND IFTAANGVYTKQKMDPKELGKYGVLFYNACFMIIPTLIISVSTG DLQQATEFNQWKNVVFILQFLLSCFLGFLMYSTVLCSYYNSAL TTAVVGAIKNVSVAYIGILIGGDYIFSLNLFVGLNICMAGGLRY SFLTLLSSQLKPKPVGEENICLDLKS |
| 6461 | 1653 | 360 | LQQTTLRITAVGQTHPIAWMAWEPSLGAFYGPASFITFVNCMYF LSIFIQLKRHPERKYELKEPTEEQQRLAANENGEINHQDSMSLS LISTALENEHTFHSQQLGASLTLLLYVALWMFGALAVSLYYPL DLVFSFVFGATSLSFSAFFVHHCVNREDVRLAWIMTCCPGRSS YSVQVNVQPPNSNGTNGEAPKCPNSSAESSCTNKSASSFKNSSQ GCKLTNLQAAAAQCHANSPLNSTPQLDNSLTEHSMNDNDIKMHV APLEVQFRTNVHSSRHKNRSKGHRASRLTVLREYAYDVPTSVE GSVQNGLPKSR LGNNEGHSR RRAYLAYRERQYNPPQQDSSDAC STLKSSRNFEKPVSTTSKKDALRKPAVVELENQKSYGLNLAI QNGPIKSNQGEGPLLGT DSTGNVRTGLWKHETTV |
| 6462 | 3 | 773 | SEELDREKKLKEDSPRKTPNKESGVPSLPVSLTSIKEEPKEAKH PDSQSMEESEKLNDDRKTPVNWKDSRGTRVAVSSPMSQHSYIQ YLHAYFPYQMYDP SHPAYRAVSPVLMHSYPGAYLSPGFHYPVYG KMSGREETEKVNTSPSVNTKTTTESKALDLLQOHANQYRSKSPA PVEKATAEREREABERERDRHSPFGQRHLHTHHHTHVGMGYPLIP GQYDFFQGLTSAALVASQVAAQASAGMFPQGRRE |
| 6463 | 2 | 350 | VILCILGGWIFKNADRSMEKKKGEPRTAEARFVWDEDLKSSD LHQAEDADEWQSEENVEHIPFHNHYPEKEMVKRSQEFYELL NKRRSVRFISNEQVPMVIDNVIRTAGL |
| 6464 | 12 | 1154 | GILRQKEREERNRIHKKEILFLEHLVVPSEMSSLSGKVQTVLG |

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|------------|--|--|--|
| | | | LVEPSKLGRTLTTHBLAMTFDCCYCPFPQCEAISKEPIVMKNL YWIQKNAYSHKENLQNLQETEAIKEELLYFKANGGALVENTTT GISRDTQTTLKRLABETGVHIIISGAGFYVDATHSSETRAMSVEQL TDVLMNEILHGADGTSIKCGIIGEIGCSWPLTESERKVLQATAH AQAQLGCFVIIHPGRSSRAFFQIIRILQEGAGADISKVTMSHLDR TILDKKELLEFAQLGCVLEYDLDLGTTELLHYQLGPDIDMPDDNKR IRRVRLVVEGECEDRILVAHDIIHTKTRLMKYGGHGYSHILTNNV PKMLLRGITENVLDKILIENTPKQWLTFFK |
| 6465 | 126 | 1396 | KMTVFFKTLRNHWKKTAGLCLLTWGGHWLYGKHCDNLLRRAAC QEAQVFGNQLIPPAQVKKATVFLNPAACKGKARTLFEKNAAPI LHLSGMDVTIVKTDYEGQAKKLELMENTDVIIVAGDGTQLQEV VTGVLRRDTEATFSKIPIGFIPLGETSSLSHTLFAESGNKVQHI TDATLAIKGETVPLDVLQIKGEKEQPVFAMTGLRWGSFRDAGV KVSQWYLEPLKIAAHFFSTLKEWPQTHQASISYTGPTERPNN EPEETPVQRPSTLYRILRLASYWAQPDALSOEVSPEVWKDVQ LSTIELSITTRNNQDPTSKEDFLNICIEPDTISKGDFTIGSR KVRNPKLHVGEQTECLOASQCTLLIPEGAGGSFSDSEYEAMPV EVKLLPRKLGFFCDPRKREQMLTSPTQ |
| 6466 | 1134 | 828 | VARGTELSQLEKAHPADMGRRKSKRPPPKKMTGTLETQFTC PFCNHEKSCDVKMDRARNTGVISCTVCLLEEFQTPITYLSEPV YSDWIDACEAANQ |
| 6467 | 301 | 2571 | GELRVLALAHGELACHAVLTASLLSLRSRLMDSMDYERPNVET IKCVVVGDNVAGKTRLCARACNATLTQYQLLATHVPTVWAIQ YRVCQEVLEERSRDVDDVSVSLRLWDTFGDHHKDRRFAYGRSDV VVLCSIANPNLSLHVKTMMWYPEIKHFCPRAPVILVGCQLDLRY ADLEAVNRARRPLARPIKPNELPPEKGREVAKELGIPYETSV VAQFGIKDVPDRAIALISRRHLQFWKSHLRNVQRPLLOAPFL PPKPPPIIVVPDPSSSECEPAHLEDPLCADVILVLQERVRI FAHKIYLSSTSSSKFYDLFLMDLSBEGELGGPSEPGGTHPEDHQGH SDQHSHHHHHHGRDFFLLRAASFDVCESVDEAGSGPAGLRAST SDGILRGNGTGYLPGRGVLSWSRAFVSIQEEMAEDPLTYKSR LMVVVKMDSSIQPGPFRAVLKYLTYGELDENERDLMHIAHIAEL LEVFDLRMMVANILNNEAFMNQETKAFHVRRTNRVKECLAKGT FSDVTFILDDGTISAHKPLLISSCDWMAAMFGGPFVESSTREVV FPYTSKSCMRVLEYLYTGMFTSSPDLDMDKLIILANRLCLPHL VALTEQYTVTGLMEATQMMVDIDGDVLFVLELAQFHCAQYLADW CLHHICTNYYNNVCRKFPFRDMKAMSPENQYFEKHRWPPVWYLKE EDHYQRARKEREKEDYLHLKRPKRRLFWNSPSSSSAASS SPSSSSAVV |
| 6468 | 3 | 1374 | DAWAGTNMAALAPVGSPPASRGPRLAAGRLRLPMLGLLQLLAEPG LGRVHHLALKDDVRHKVHLNTFGFFKDGVMVNVSSLSLNEPED KDVTIGFSLDRTKNDGFSSYLDEVDVNYCILKKQSVSVTLILLDI SRSEVRVKSPPPEAGTQLPKIIFSRDEKVLGQSQEPNVNPPASAGN QTQKTQDGGKSKRSTVDSKAMGEKSFVHNNGGAVSFQFFFNIS TDDQEGLYSLYFHKCLGKELPSDKFTFSLDIEITEKNPDSYLSA GEIPLPKLYISMAFFFLSGTIWIHILKRRNDVFKIHWLMAAL PFTKSLSLVFHAIDVHYISSQCFPIEGWAVVYIITHLLKGALLF ITIALIGTWAFIKHILSDKDKKIFMIVIPRRVLANVAYIIIES TEEGTTEYGLWKDSLFLVDLLCCGAILFPVWVSIRHLQESATD GKGKFSRAHFVLLSL |
| 6469 | 3 | 1374 | DAWAGTNMAALAPVGSPPASRGPRLAAGRLRLPMLGLLQLLAEPG LGRVHHLALKDDVRHKVHLNTFGFFKDGVMVNVSSLSLNEPED KDVTIGFSLDRTKNDGFSSYLDEVDVNYCILKKQSVSVTLILLDI SRSEVRVKSPPPEAGTQLPKIIFSRDEKVLGQSQEPNVNPPASAGN QTQKTQDGGKSKRSTVDSKAMGEKSFVHNNGGAVSFQFFFNIS TDDQEGLYSLYFHKCLGKELPSDKFTFSLDIEITEKNPDSYLSA |

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|------------|--|--|---|
| | | | GEIPLPKLYISMMAFFFFLSGTIWIHLKRRNDVFKIHWLMAAL PPTKSLSLVFHAIDYHYISSQGFPFIEGWAVVYIITHLLKGALLF ITIALIGTGWAFIKHILSDKDKKIFMIVIPRRVLAVAYIIIES TEEGTTEYGLWKDSLFLVDLLCCGAILFPVWVSIRHLQESATD GKGKFSRAHFVLLSL |
| 6470 | 2726 | 1437 | AAASGVSSRADAPVLAQSPASAGNGRPSTPRVPGSRRHPSAPRS GPLPREDGCRTPGPQLPLPGALLRPRTLLSSAAETGRSRHPDT QHPSSGGRCRGGTESPSSAAGRPAASMAEAEEDCHSDTVRADDD ENESPAETDLQAQLQMFRAQWFMELAPGVSSSNLENRPFCRAAR SLQKTSADTKGQEQAKEKARELFLKAVEEEQNGALYEATKPY RRAMQLVPDIEFKITYTRSPDGDGVNGSYIEDNDDSKMADLLS YFQQQLTFQESVLKCOPELESSQIHISVLPMEVLMYIFRWVVS SDLDLRSLEQLSLVCRGFYICARDPEIWRLLACKVWGRSCIKLV PYTSNREMPLEPRPRVFDGVYISKTTYIRQGEQSLDGFYRAWHQ VEYYVYIRFPDGHVMMLTTPPEPQSIIVPRLRTR |
| 6471 | 1750 | 299 | FFFDKMAAGSGVGGKRSSKSDADSGFLGLRPTSDVPALRRRRR GPRNKKRGWRRLAQEPLGLEVDQFLEDVRLQERTSGGLLSEAPN EKLFPVDTGSKKEKGLTKKRTKVQKSLLLKKPLRVDLILENTSK VPAPKDVLAHQVPNAKKLRRKEQLWEKLAQGEPLPREVRAQAR LLNPASATRAKPGPDQTVRPFYDLWASDNPLDRPLVGQDEFFLE QTKKKGVKRPALRHTKPSQAPAVEVAPAGASYNPSFEDHQTLLS AAHEVELQRQKEAEKLERQLALPATEQAATQESTFQELCEGLLE ESDGEPEGPGQGEPEAGDAEVCPTPARLATTEKKTEQQRREKA VHRLRVQQAALRAARLRHQELFRLRGIKAQVALRLAELARRQRR RQARRAEADKPRRLGLRLKYQAPDIDVQLSSELTDSLRLTKPEG NILRDRFKSFQRRNMIEPRERAKFKRKYKVLVEKRAFREIQL |
| 6472 | 3 | 897 | SCGSDRAQWAMEFFFDVDALFPERITVLDQHLRFPARRPGTTTP ARVDLQQIMTIIDELGKASAKAQNLSAPITSASRMQSNRHVVY ILKDSSARPAGKGAIIQFIKVGKYLFLVDDREAHNEVEPLCIL DFYIHESVQRHGHGRELQYMLQKERVEPHQLAIDRPSQKLLKF LNKHYNLETTVPQVNNFVIFEGFFAHQHRPPAPSLRATHSRAA AVDPTPAAPARKLPKRAEGDIKPYSSSDREPLKVAVEPPWPLN RAPRRATPPAHPPPPSSSLGNSPERGPLRPFVP |
| 6473 | 22 | 912 | SSAEFVWECEKMAAEPNKTETIQLFKRLRAVFTNKACFDGAK NPSWASITYGVFLCIDCSGVHRSGLVHLSFIRSTELDSNWNWFQ LRMCQVGGNANATAFFRQHGCTANDANTKYNRAAQMYREKIRQ LGSAAALRHGTDLDWIDNMSSAVPNHSPKKDSDFTEHTQPPAW DAPATEPSGTQQPAPSTESSGLAQPEHGPNTDLLGTSPKASLEL KSSIIIGKKKPAAKKGLGAKKGLGAQKVSSQSFSSEIERQAQVAE KLREOQAADAKKQAEESMVASMLAYQELQIDR |
| 6474 | 3 | 462 | LQRQRQHPAAAPAVPVRCFTFCFTDIVIMPKRKSPEENTEGKDG KVTKEPTRRSARLSAKPAPPKPEPKPRKTSAKKEPGAKISRGA KGKKEEKQEGAGKEGTAPSENGETKAEIHIISRSTVNVSTSRGTP PSTLSVKGQIETVRVKGTEN |
| 6475 | 3 | 462 | LQRQRQHPAAAPAVPVRCFTFCFTDIVIMPKRKSPEENTEGKDG KVTKEPTRRSARLSAKPAPPKPEPKPRKTSAKKEPGAKISRGA KGKKEEKQEGAGKEGTAPSENGETKAEIHIISRSTVNVSTSRGTP PSTLSVKGQIETVRVKGTEN |
| 6476 | 106 | 1090 | ARAMAQYKGTMRBAGRAMHLLKKRRERQREQMEVLKORIAEETIL KSQVDKRFSAHYDAVEAEKSSTVGLVTLNDMKARQEAALVRERE RQLAKROHLEEQRLQERQREQRRERKRKISCLSFDLDDDD QADAAEARRAGNLGKNPDVDTSLPDRDREEEENRLREELRQEW EAQREKVDEEMEVTFSYWDGSGHRRTRVRVKGNVTQQLFKKAL QGLRKDFLELSAGVEQLMFIKEDLILPHYHTFYDFIARARGK SGPLFSFDVHDDVRLSLDATMEKDESHAGKVLRVRSWYKKNKHIF PASRWEAYDPEKKWDKYTIR |

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|------------|--|--|--|
| 6477 | 227 | 915 | LQGHLMGIMAASRPLSRFWGKNTVCVGRNYADHVREMRSAVL SEPVLFLKFPSTAYAPEGSPILMPAYTRNLHHELELGVVMGKRRCR AVPEAAAMDYVGGYALCLDMTARDVQDECKKKGLPWTAKSFTA SCPVSFAFVPKEKIPDPHKLKLWLKVNGLRQEGETSSMIFSIDY IISYVSKIITLEEGDIILTGTTPKGVGPVKENDEIEAGIHGLVSM TFKVEKPEY |
| 6478 | 2 | 1495 | FVSSRILPESLASSEASTLEAMGRKEEDDCSSWKKQTTNIRKTF IFMEVLGSGAFSEVFLVKQRLTGKLFALKCIKKSPAFDRSSLEN EIAVLKKIKHENIVTLEDIYESTTHYYLVMQLVSGGELFDRILE RGVYTEKDALSLVIQOVL SAVKYLHENGIVHRDLKPENLLYLTP ENSKIMITDFGLSKMEQNGIMSTACGTPGVYAPVLAQKPYSKA VDCWSIGVITYILLCGYPPFYEETESKLFKEIKEGYVEFESPPW DDISESAKDFICHLLKDPNERYTCEKALSHPWIDGNTALHRDI YPSVSLQIQKNFAKSKWRQAFNAAAVVHMRKLMNLHSPGVPR EVENRPPETQASSETSRPSPEITITEAPVLDHSLVALPALTQLPC QHGRRPAPGGRLNCLVNGSLHISSSLVPMHQGSLAAGPCGCC SSCLNIGSKGKSSYCEPTLLKKANKKQNFKSEVMVPVKASGSS HCRAGQTGVCLIM |
| 6479 | 3 | 949 | SCRGPWHFAGGQAGAMELLSALSGLGELALSFSRVPLFPVFDLS YFIVSILYLKYEFGAVELSRRIPIASWLCAMLHCFGSYILADLL LGEPLIDYFSNNSSILLASAVWYLIFFCPLDLFYKCVCFPLVKL IFVAMKEVVRVKIAVGIIHAAHHYHHGWFVMIATGWVKGSGVA LMSNFEQLLRGVWKPETNEILHMSFPTKASLYGAILFTLQQTRW LPVSKASLIFITLFMVSKVFLTATHSHSSPFDALGYICPVL FGSACGGDHHHDNHGSGSHSGGPGAGHSAMPKSKKEELSEGRK KKAKKAD |
| 6480 | 192 | 514 | DFMSIYFPIHCPDYLRSKMTVEVMNTQPMEEIGLSPRKDGLSY QIFDPDSDFDRCKKLDRLPSIVVEPTEGEVESGELRWPFEEFL VQDEQDNCEETAKENKEQ |
| 6481 | 110 | 1131 | KSRMDLDVVMFVIAGGTLAIPILAFVASFLWLWPSALIRIYYWY WRRITLGMQVRYVHHEDYQFCYSFRGRPGHKPSILMLHGFSAHKD MWLSVVKFLPKNLHLVCVDMPGHEGTTRSSLDLSIDGQVKRIH QFVECLKLNKKPFHLVGTSMGGQVAGVYAAYYPSDVSSLWLVC AGLQYSTDNQVQRLKELQGSAAVEKIPLIPSTPEEMSEMLQLC SYVRFKVPQQILQGLVDVRI PHNNFYRKLFLEIVSEKSRYSLHQ NMDKIKVPTQI IWGQDQVLDVSGADMLAKSIANCQVELLENG HSVVMERPRKTAKLIIDFLASVHNTDNNKKLD |
| 6482 | 2517 | 568 | EPVSKVSQSRKAGVPTANTEESQAVEAAMNVFPAEVCEKFOA ALALSRVELHKNPEKEPYKSKYSARALLEEVKALLGPAPEDDE RPEADGPGAGDHALGLPAEVVEPEGPAQRAVRLAVIEPHLV NHIDTEELSAGEEHLVKCLRLRLRRLSHDCISLCTQAQNNLGI LWSEBEEIETAQAYLESSEALYNQYMKVGSPPDPTEFLPEE EKLTEQERSKRFEKVYTHNLYLAQVYQHLEMFKAHCHSTL KRQLEHNAYHPIEWAINAATLSQFYINKLCFMEARHCLSAANVI FGQTGKISATEDTPEAEGEVPELYHQKGEIARCIWKYCLTLMQ NAQLSMQDNIGELDLDKQSELRLALRKELDEESIRKKAQVQGT GELCDAISAVEEKVSYLRLPDPEEARELFLLGQHYVFEAKEFFQ IDGYVTDHIEVVQDHSALFKGLAFETDMERRCKMHKRRIAMLE PLTVDLNPQYLLVNRQIQFEIAHAYYDMMDLKVAIADRLRDPD SHIVKKINNLSALKYYQLFLDSLRLDPNKVPPEHIGEDVLRPA MLAKFRVARLYGKIITADPKLENLATSLSEHYKFIVDYCEKHP EAAQIEVELELSKEMVSLPTKMERFRTKMALT |
| 6483 | 3 | 623 | NSHLLCGLRARAPLSANGREARAMEQRLAEFRAARKRAGLAAQP PAASQGAQTPGEKAEAAATLKAAPGWLKRLVWVKPRPASARAQP GLVQEAQPGSTSETPWNTAIPLPSCWDQSFLLTNITFLKVLW LVLLGLFVLEFGLAYFVLSLFYWMYVGTGTRGPBEKKEGKSAYS |

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|------------|--|--|---|
| 6484 | 201 | 965 | VFNPGCEAIQGTTLTAEQLERELQLRPLAGR QLAVKTKMSGLRPGTQVDPEIELFVKAGSDGESIGNCFFCQRLF MILWLKGVKFNVTVDMDTRKPEELKDLAPGTNPPFLVYNKELKT DFIKIEEFLEQTLAPPYPHLSPKYKESFDVGCNLFPAKFSAYIK N ^o QKEANKNFEKSLLEKFKRLDDYLNTPLLDEIDPDSAEPEPVS RRLFLDGDQLTLADCSLLPKLNI ^o IKVAAKRYRDFDIPAEFSGVW RYLHNAYAREEFTHTCPEDKEIENTYANVAKQKS |
| 6485 | 6 | 1091 | FVDLVRAVEFLPCPDSQKLEKEQSSSESMGNSMRSTILEDEE DEEPPRVLLYHEPRSFVEGMLVWHKHKYPFWPAVVKSVQRDK KASVLYIEGHMNPKNMGFTVSLKSLKHFDCKEKQTLNQAEDF NQDIGWCVSLITDYRVRLGCGSFAGSFLEYAADISYPVRKSIQ QDVLGTLKPLQSLKSGSPEEPVVGCPGQRPCKRMPLPDRSRAARD RANQKLVEY ^o IGAKAGAESHLRAILKSRKPSRWLQTFLLSSQYVT CVETYLEDEGQLDLVVKYLQGVYQEVGAKVLQRTNGDRIRFILD VLLPEAII ^o CAISAGDEVYKTAEEKYIKGPSLSYREKEIPDNQL LEERNRRRR |
| 6486 | 10 | 581 | LVLQAGGAHLSPSRVTQGIYYMLAFSEMPKPPDYSELSDSLTLA GGTGRFSGPLHRAWRMNFRQRMGWIGVGLYLLAGAAAFYVVE ISETYNRLALEHIQOHPEEPLEGTTWTHSLKAQLLSLFPFWVWT IFLVPYLQMF ^o FLYSCTRADPKTVGCIIPICLAVICNRHQAFV KASNI ^o SRQLIDT |
| 6487 | 352 | 863 | SFLKPLRGKMSVTLTVDGDIKIEVFCERTPKTCENFLALCASN YYNGCIPHRNI ^o KGFMVQTDGPTGTGRGNSIWGKKFEDEYSEYL KHNRGVVSMANGPNTNGSQFFITYGKQPHLDMKYTVFGKVID GLETLELEKLPVNEKTYRPLNDVHIKDITIHANPFAQ |
| 6488 | 878 | 241 | TALQFEGTSGPPLSLRFPALPSGTGRFKPLPGARGPSWFPSPRPV MEPPNLYPVKLYVYDLSKGLARRLS ^o IMLGKQLEGIWHTSIVVH KDEFFFGSGGISSCPPGGTLLGPPDSVVDVGSTEVTEIFLEYL SSLGESLFRGEAYNLFHNCTNFSNEVAQFLTGRKIPSYITDLP SEVLSTPFGQALRPLLD ^o SIQIQPPGGSSVGRPNQGS |
| 6489 | 1457 | 375 | KVAKMATALSEEELDNEDYISLLNVRREASSEELKAAYRRLCML YHPDKHRDPELKSQAERL ^o FNLVHQAYEVLSDPQTRAIYDIYGRK GLEMEGWVVERRRTPAEIREEFERLQREEREERLQRTNPKGT ISVGVDATDLFDYDEYEDVSGSSFPQIEINKMHISQSIEAPL TATDTAILSGSLSTQNGNGGGSINFALRRVTSAGWGELEFGAG DLQGPLFGLKLFRLNLTFRCFVTTN ^o CALQFSSRGIRPGLTTVLAR NLDKNTVGYLQWHCSSP ^o LLQVQRP ^o HRNTRACAPEPSFRPFLHVP TWDAECSGARTPSTAWTSAAVKLREACLSGPGSGSHQLLLLTPR SKRRTGGG |
| 6490 | 3 | 1183 | HEAGCEVWLGYGPRAAAAAAATVLFGGAGPTETMFVARSLAADH KDLIHDSVDFHGRRMATCSSDQSVKVVWDKSESGDWHCTASWKT HSGSVVRVTWAHPEFGQVLASCSFDRTAAVWEEIVGESNDKLRG QSHWVKRTTLVDSRTSVTDVKFAPKHMGLMLATCSADGIVRIYE APDV ^o MNLSQWSLQHEISCKLSCSCISWNPSSSRAHSPMIAVGSD DSSPNAMAKVQIF ^o EYNENTRKYAKAETLMTVTD ^o PVHDIAPAPNL GRSFHILAIATKDVRIFTLKPVRKELTSSGGPTKFEIHIVAQFD NHNSQVWRVSWNITGTVLASSGDDGCVRLWKANYMDNWKCTGIL KNGSPVNGSSQQT ^o SNPSLGSNIPSLQNSLNGSSAGRKHS |
| 6491 | 3 | 1183 | HEAGCEVWLGYGPRAAAAAAATVLFGGAGPTETMFVARSLAADH KDLIHDSVDFHGRRMATCSSDQSVKVVWDKSESGDWHCTASWKT HSGSVVRVTWAHPEFGQVLASCSFDRTAAVWEEIVGESNDKLRG QSHWVKRTTLVDSRTSVTDVKFAPKHMGLMLATCSADGIVRIYE APDV ^o MNLSQWSLQHEISCKLSCSCISWNPSSSRAHSPMIAVGSD DSSPNAMAKVQIF ^o EYNENTRKYAKAETLMTVTD ^o PVHDIAPAPNL GRSFHILAIATKDVRIFTLKPVRKELTSSGGPTKFEIHIVAQFD NHNSQVWRVSWNITGTVLASSGDDGCVRLWKANYMDNWKCTGIL |

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|------------|--|--|--|
| 6492 | 34 | 2573 | <p>KGNQSPVNGSSQQTSTNPSLGSNIPSLQNSLNGSSAGRKHS</p> <p>IPFLKSCCCCLDFDFPPPLDQVQEECEVERVTEHGTPKPFRRK FDSVAFGESQSEDEQFENDLETDPPNWQQLVSRVLLGLKPCFI KRQEVINELFYTERAHVRTLKVLDQVYQVRVSRGILSPSELRK IPSNLELDILQLHIGLNEQMKAVRKRNETSVIDQIGEDLLTWFGS PGEEKLKHAAATFCNQPFPALEMIKSRQKDSRFQTFVQDAESN PLCRLQLKDIPTQMQRLLTKYPLLDNIATYTEWPTEREKVKK AADHCRQILNYVQAVKEAENKORLEDYQRRDLTSSSLKSEYPN VEELRNLDLTKKRMIHEGPLVWKNRDKTIDLYTLLELDILVLL KQDDRLVLRCHSKILASTADSKHTFSPVTKLSTVLVRQVATDN KALFVISMDSNGAQIYELVAQTVSEKTVWQDLICRMAASVKEQS TKPIPLPQSTPGEGDNDEEDPSKLKEEQHGISVTGLQSPDRDLG LESTLISSKQSHSLSTSGKSEVRDLFVAERQFAKEQHTDGTLLK EVGEDYQIAIPDSHLPVSEERWALDALRNLGLLQQLLVQQLGLT EKSVDQWQHFPYRTASQGFQTDSTVIONSENKAYHSGEGHMP FRGTGTDIATCYSPTSTESFAPRDSVGLAPQDSQASNILVMDH MIMTPEMPTMBPEGGDDSGEHFFDAREAHSDENPSEGDGAVNK EEKDVNLRISGNYLILDGYDPVQESSTDEEVASSITLQPMGTGIP AVESTHQOQHSPOPTHSDGAISSPTPEFLVQQRWGAMEYSCFEI QSPSSCADSSQSQIMEYIHKIEADLEHLKKVEESYITLLCQRLAGS ALTDKHSDBKS</p> |
| 6493 | 557 | 1147 | <p>TPARMAYQGSSTSDCMSKTLDSASAHFAASAVVSAVPVSRSEVA KEQNTGHNINGVVPQSGTSKTLYSTNMALSSSPGISAVQLVRT VGHTTTNHLI PALCTSSPQTLPMNNSCLTNAVHLNNVSVVSPVN VHINTRTSAPSPTALKLATVAASMDRVPKVTSSAIISSIRENH EPERLGLNGIAETTVAMEVT</p> |
| 6494 | 2425 | 1052 | <p>AVAGGARPCSTPSSPHRRRHRPRPLPRPPAATMSASAVVYLD LKGKVLICRNYRGDVMSEVEHFMPILMEKEEGMGLSPILAHGG VRFMWIKHNNLYLVATSKKNACVSLVFSFLYKVVQVFSEYFKEL EESIRDNFVVIYELLDELMDFGYPQTTDSKILQEYITQEGHKL ETGAPRPPATVTNAVSWRSEGIKYRKNEVFLDVIESVNLVLSAN GNVLRSEIVGSIKMRVFLSGMPELRLGLNDKVLFDNTGRGKSKS VELEDVKFHQCVRLSRFENDRTISFIPPDGEFELMSYRLNTHVK PLIWIESVIEKHSRISRIEYMIKAKSQFKRRSTANNVEIHIPVN DADSPKFKTTVGSVKWVPENSEIIVWSIKSFPGGKEYLMRAHFG PSVEAEDKEGKPPISVKFEIPYFTTSGIQVRYLKIIEKSGYQAL PWVRYITQNGDYQLRTQ</p> |
| 6495 | 2425 | 1052 | <p>AVAGGARPCSTPSSPHRRRHRPRPLPRPPAATMSASAVVYLD LKGKVLICRNYRGDVMSEVEHFMPILMEKEEGMGLSPILAHGG VRFMWIKHNNLYLVATSKKNACVSLVFSFLYKVVQVFSEYFKEL EESIRDNFVVIYELLDELMDFGYPQTTDSKILQEYITQEGHKL ETGAPRPPATVTNAVSWRSEGIKYRKNEVFLDVIESVNLVLSAN GNVLRSEIVGSIKMRVFLSGMPELRLGLNDKVLFDNTGRGKSKS VELEDVKFHQCVRLSRFENDRTISFIPPDGEFELMSYRLNTHVK PLIWIESVIEKHSRISRIEYMIKAKSQFKRRSTANNVEIHIPVN DADSPKFKTTVGSVKWVPENSEIIVWSIKSFPGGKEYLMRAHFG PSVEAEDKEGKPPISVKFEIPYFTTSGIQVRYLKIIEKSGYQAL PWVRYITQNGDYQLRTQ</p> |
| 6496 | 247 | 559 | <p>LRAVSLPLQLVLPYISHSFLFCIMFLCAQEWLTLGLNVPLLFY HFWRYPHCPADSSSELAYDPPVVMNADTLYSCQKEAWCKLAFYLL SFFYYLYCMIYTLVSS</p> |
| 6497 | 1053 | 352 | <p>ANTQICRLCPRRHLHPPCGAKMGNGTEEDYNFVKVVLIGESGV GKTNLLSRFTRNEFSHDSRTTIGVEFSTRTVMLGTAAVKAQIWD TAGLERYRAITSAYRGAVGALLVFDLTQKQTYAVVERWLKELY DHAETIVVMLVGKNSDLSQAREVPTTEARMFAENNGLLFLETS ALDSTNVELAFETVLKEIFAKVSKQRQNSIRTNATLGSQAQAGQ</p> |

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|------------|--|--|---|
| 6498 | 2636 | 272 | EPGPGKCRACISL SLRLCPWGTHTLAGPTTMRLLSLLALLRPALEPLILGLSLGCSLSL LRVSWICGEGEDPCVEAVGERGGPQNPDSRARLDQSDDEFKPRI VPYYRDPNPKPKVLRTRYIQTELGSRRERLLVAVLTSRATLSTL AVAVNRTVAHHFPRLLYFTGQGRARAPAGMQVVSHTGDERPAWLM SETLRHLHTHFGADYDWFIMQDDTYVQAPRLAALAGHLSINQD LYLGRAEEFIGAGEQARYCHGGFGYLLSRSLLLRLRPHLDGCRG DILSARPDWLGRCLIDSLGVCVSGHQGQYRSFELAKNRDPE KEGSSAFLSAFAVHPVSEGLTMYRLHKRFSALELERAYSEIEQL CAQIRNLTLVLTPEGEAGLSWPVGLPAPFTEHSRFEVLGWDYFTE QHTFSCADGAPKCPLQASRADVGDALLETALQNLNRYQPRIRF QKQRLNLNGYRRFDPARGMEYTLDDLLECVTQRGHRALARRVSL LRPLSRVEILPMPYVTEATRVQLVLPVLAEEAAAPLEAFPA NVLEPREHALLTLLVYGPREGGRGAPDPFLGVKAAAELEERRY PGTRLAWLAVRAEAPSQVRLMDVVSCKHPVDTLFLLTIVWTRPG PEVLNRCRMNAISGWQAFFPVHFQEFNPALSPQRSPPGPPGAGP DPPSPGADPSRGAPIGGRFDRQASAECCFYNDYLAARARLAG ELAGQEEBEALEGLEVMDFLRFSGHLHFRVPEPGLVQKFSLRD CSPLRSEELYHRCRLSNLEGLGGRALAMALFEQEQA NST |
| 6499 | 3 | 2040 | SCSADTRPSGQAWPTVGLRAAAGAFRTGSPALGPTFPQVACL GHPVVRPQVSGGPGAMPDPAHLPPFYGISIRAEAEHLKLKLAGM ADGLFLLRQCLSLGGYVLSLVHDVRFHHPFIERQLNGTYAIA GKAHCGPAELCEFYSRDPDGLPCNLKPCNRPSGLEPOPGVDFC LRDAMVRDYVRQTKLEGEALQAIISQAPQVEKLIATTAHERM PWYHSSLTREEAERKLYSGAQTDGKFLLRPRKEQGTALSLIYG KTVYHYLISQDKAGKYCIPEGTKFDTLWQLVEYLKADGLIYC LKEACPNSASNASGAAAPTLPAHPSTLTHPQRRIDTLNSDGYT PEPARITSPDKPRPMPMDTSVYESPSYSDPEELKDKLFLKRDNL LIADIELGCGNFGSVRQGVYMRKKQIDVAIKVLKQTEKADTE EMMREAIQIMHQLDNPYIVRLIGVCQABALMLVMEMAGGGPLHKF LVGKREEIPVSNVAELLHQVSMGMKYLEKNFVHRDLAARNVLL VNRHYAKISDFGLSKALGADDSYTTARSAGKWLKMYAPECFIN RKFSSRSDVWSYGVIMWEALSYGQKPYKMKGPVMAFIEQGKR MECPPECPPPELYALMSDCWIKWEDRPDFTVEQMRACYSSLA SKVEGPPGSTQKAEACA |
| 6500 | 1773 | 726 | TGPTHASADAWGLVRSVTEWCANVRGNPCAAALSCPQAVLDAGK MLESSESSFLKGVMLOSI FCAITMLGHIRIGHGNRMHHEHHHL QAPNKEDILKISEDERMELSKSFRVYCIILVKPKDVSLWAAVKE TWTKHCDKAEFFSSENVKVFESINMDTNDMMLMRKAYKYAFDK YRDQYNWFFLARPTTFAI IENLKYFLKKDPSQPFYLGHTIKSG DLEYVGMEGGIVLSVZSMKRLNSLLNIPEKCPEQGGMIWKISED KQLAVCLKYAGVFAENAEDADGKDVPTKSVGLSIKEAMTYHPN QVVEGCCSDMAVTFNGLTFNQMHVMYGVYRLRAFGPYFQ |
| 6501 | 1 | 570 | LVGMSGGGTETFPVGEAAPGGGSKKRDLSLGTAGSAHLI IKDLGE IHSRLLDHRPVIQGETRYFVKEFEKRGLEMRVLENLKNMIHE TNEHTLPKCRDTRMDSLSQVLQRLQAANDSVCRLLQREQERKKI HSDHLVASEKQHMLQWDFNMKEQPNKRAEVDEEHRKAMERLKEQ YAEKEDLAKFSTF |
| 6502 | 213 | 1650 | AGNKPDPWAGRNRTAVLPDVSVFHRDVDGWRSWLQSSYQAVKE KSSEALEFMKRDLEFTQVVQHD TACTIAATASVVKEKLATEGS SGATEKMKGLSDFLGVISDTFAPSPDKTIDCDVITLMGTSPSG AEPYDGTARLYSLQSDPATYCNEDGPPPELFDWLQSQFCEEK KGEISELLVGSPSIRALYTKMVPAAVSHSEFWHRYFYKVHQLQEQ EQARRDALQRAEQSISEEPGWEEEEEELMGISPISPKEAKVPV AKISTFPEGEPGFSPEENLVTSVEPPAEVTPSESESISLVT QIANPATAPEARVLPKDLKQLLEASLEBQGLAVDVGETGSPSP |

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|------------|--|--|---|
| | | | IHSKPLTPAGHTGGPEPRPPARVETLREEAPTDLRVFELNSDSG KSTPSNNGKKGSSTDISSEDWEKDFDLDMTEEEVQMALSKVDASG EVSGPGGSEGSEPNPGPCESSPQPAQLSPQEGPCSLR |
| 6503 | 213 | 1650 | AGNKPDWPAGRNRTAVLPDVSVFHREDVGVNRSWLQSSYQAVKE KSSEALEFMKRDLEFTQVQVHDTACTIAATASVVKEKLATEGS SGATEKMKKGLSDFLGVISDTFAPSPDKTIDCDVITLMGTPSGT AEPYDGTAKRLYSLSQSDPATYCNEDGPPPELFDWLSQFCLBEK KGEISELLVGSFPIRALYTKMVPAAVSHSEFWHRYFYKVKHOLEQ EQARRDALQRAEQSISEEPGWEEEEELMGISSIPSPKEAKVPV AKISTFFEPEGPQSPCFENLVTSVEPPAEVTPSESESISLVT QIANPATAPAEARVLPKDLKSLKLEASLEEQLAVDVGETGPPSP IHSKPLTPAGHTGGPEPRPPARVETLREEAPTDLRVFELNSDSG KSTPSNNGKKGSSTDISSEDWEKDFDLDMTEEEVQMALSKVDASG EVSGPGGSEGSEPNPGPCESSPQPAQLSPQEGPCSLR |
| 6504 | 2131 | 1294 | GKVCVLAHVCLSLILSPPPAGMKTTPNAQEAEGQQTAAAGRATG SANMTKKKVSQKKQGRPPSSQPCRNIVGCRISHGWKEGDEPITQ WKGTVLDQVPINPSLYLVKYDGDICVYGLELHRDERVLSLKILS DRVASSHISDANLANTIIGKAVEHMFEGEHGSKDEWRGMVLAQA PIMKAWFYITYEKDPVLYMYQLDDYKEGDLRIMPESSESPTTE REPGGVVDGLIGKHVEYTKEDGSKRIGMVIHQVEAKPSVYFIKF DDDPHIYVYDLVKKS |
| 6505 | 2131 | 1294 | GKVCVLAHVCLSLILSPPPAGMKTTPNAQEAEGQQTAAAGRATG SANMTKKKVSQKKQGRPPSSQPCRNIVGCRISHGWKEGDEPITQ WKGTVLDQVPINPSLYLVKYDGDICVYGLELHRDERVLSLKILS DRVASSHISDANLANTIIGKAVEHMFEGEHGSKDEWRGMVLAQA PIMKAWFYITYEKDPVLYMYQLDDYKEGDLRIMPESSESPTTE REPGGVVDGLIGKHVEYTKEDGSKRIGMVIHQVEAKPSVYFIKF DDDPHIYVYDLVKKS |
| 6506 | 1 | 1350 | EVSPPTSCCLTVAADPGVSEGFGRFGAGCEMPGRGRCPDCGST ELVEDSHYSQSQVLVCSDCGVVTEGVLTTFSDENLREVITYSR STGENEQVSRSQQRGLRRVRDLRCRVLQLPPTFEDTAVAYYQQA RHSGIRARLQKKEVLVGCCVLITCRQHNWPLTMGAICTLLYAD LDVFSSTVMQIVKLLGLDVPSCLAELVKTYCSSFKLFQASPSV PAKYVEDKEKMLSRMTQVLVELANETWLVTRHPLPVTATFLA WQLQPADRLSCSLARFCKLANVDLPYPASSRLQELLAVLLRMA EQLAWLRVLRDKRSVVKHIGDLLQHRQSLVRSAPFRDGTAEVET REKEPPGHWGQGGEGEVGNNSLGLPQGRPASPALLLPPCMLKS PKRICPVFPVSTVTGDNISDSIEQYLRTPEVRDFQRAQAAR QAATSVNPP |
| 6507 | 1878 | 929 | RSHASRLPELPSGCLVLQVQELVQMSGMEATVTIPIWONKPHGA ARSVVRRIGTNLPLKPCARASFETLPNISDCLRDVPVPVTLAD IAWIAADEEETIYARVRSOTRPLRHTWKPSPLIVMQRNASVPLNR GSEERLLALKKPPALPALSRTELODELSHLSQIAKIVAADAAS ASLTDFLSPGSSNVSSPLFCGSSFSHTTSFVVISDITBETEVE VPPLSVPLLCASPECCPKEHKAACSSSEDDCVSLSKASSFA DMMGILKDFHRMKQSQDLNRSLLKEEDPAVLISEVLRKFKALKE EDISRKN |
| 6508 | 862 | 342 | WEARKRPQRWPSERRVRVPPHQLQRGRSGLEPGTFRKMAAARF SLGRVLPGSSVFLCDMQEKFRHNIAYFPQIVSVAARMLKNTTL DLLDRGLQVHVVDACSSRSQVDRVLVALARMRQSGAFLSTSEGL ILQLVGDAVHPOFKEIQKLIKEPADSGLLGLFQGNLSLH |
| 6509 | 2 | 1053 | FWNPRGGKRKRQAQAVTQAATRASGTPSPRDGTMTQGLSVAN KAPGTEGQQVHGEKKEAPAVPSAPPSEYEAATSGEGMKAGAFPP APTAVPLHPSWAYVDPSSSSSYDNGFPTGDHLEFTTFSWDDQKV RRVFVRKVTYILLIQLLVTLAVVALFTFCDPVKDYVQANPGWYV ASYAVFFATYTLTACCSPRRHFPWNLLITVFTLSMAYLTGML |

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|------------|--|--|---|
| | | | SSYYNTTSVLLCLGITALVCLSVTVFSFQTKFDFTSCQGVLFVL LMTLFFSGILAILLPFQYVPWLHAYVAAAGAGVFTLFLALDTQ LLMGNRRHSLSPPEYIFGALNIYLDIIYIFTFPLQLFGTNRE |
| 6510 | 37 | 1156 | PCALDGCPCQGAHVHPLSSANGLLAFLKTKQFVLHLLVGFVFFVS GLVINFLVQLCTLALWVSKQLYRRRLNCRILAYSLWSQLVMLLEWW SCTECTLTFTDQATVERFGKBHAVIILNHNFEIDFLCGWTMCERF GVLGSSKVLAKKELLYVPLIGWTNYFLEIVFCRKRWEEDRDTVV EGLRRLSDYPEYMWFLLYCEGTRFTETKHRVSMEEVAAAKGLPVL KYHLLPRTKGTAVKCLRGTVAAVYDVTNFRGNKPNPSLLGIL YGKKYEADMCVRRFPLEDIPLDEKEAAQWLHKLKYEKDALQEIY NQKGMFPGEQFKPARRPWTLLNFLSWATILLSPLFSFVLGVFAS GSPLLILTFLGFVAGNGHCR |
| 6511 | 2541 | 1425 | GEEQPLAAAPTECLEQVIGGAGDPGTWASFPSPPLPGFAPLKGGK THATNFSDIVKQGYVKMKSRLGIYRRCWLVRKSSSKGPKORLE KYPDEKSVCLRGCPKVTESINVKCVTRLPKETKRQAVAIIFTDD SARTFTCDSELEAEWYKTLSECLGSRINDISLGEPLDAPGV QCEQTDREFNVLLPCPNLDVYGECKLQITHENIYLDIHNPRVK LVSWPLCSLRRYGRDATRTFEAGRMCDAGEGLYTFQTEGEQI YQRVHSATLAIABEQEKRVLLEMEKNVRLNKGTEHYSYPCPTPT MLPRSAWWHITGSQNIABASSYAGEGYGAQAASSETDLLNRFI LLKPKPSQGDSSAEKTPSQ |
| 6512 | 159 | 807 | FGKKSITWFLSRSLRVASGRSCKLGHGGYTGSQPGFGEPRDGA EVPSSGSRATGCGRGVGRARQGRAPGSSIWKEPRMVCTRKT TLVSTCVILSGMTNII CLLYVGVWTVNYIASVYVRGQEPAPDKKL EEDKGDTLKIIERLDHLENVIKQHIQEPAPKPEAEAEPTDSS LFAHWQQLSPEGRVALKQFQYGYGNAYLSDRPLDRP |
| 6513 | 2 | 756 | FVSPGPGSLAQLNLIWQLTDTKQLVHSFAEGQDQGSAYANRTA LFPDLLAQGNASRLQVRVVADEGSFTCFVSIIRDFGSAAVSLQV AAPYSKPSMTLEPNKDLRPGDVTITCSSYQGYPEAEVFWQDQ GVPLTGNVITTSQMANEQGLFDVHSILRVVLGANGTYSCLVRNPV LQDAHSSVTITPQRSPTGAVEVQVPEDPVVALVGTDTATLRCSF SPEPGFSLAQLNLIWQLTDTKQLVHSFAEGQDQGSAYANRTALF PDLLAQGNASRLQVRVVADEGSFTCFVSIIRDFGSAAVSLQVAA PYSKPSMTLEPNKDLRPGDVTITCSSYQGYPEAEVFWQDQGV PLTGNVITTSQMANEQGLFDVHSILRVVLGANGTYSCLVRNPV QDAHSSVTITPQRSPTGAVEVQVPEDPVVALVGTDTATLRCSFSP EPGFSLAQLNLIWQLTDTKQLVHSFTEGR |
| 6514 | 985 | 302 | VGIPGPTISSAEMEDLLDLCEELRYSLATSRKMGRRQQESA QAEHNLNGKNSLTLTGETSSAKLPCRQGGWAGDSVKASKPRR KASEIEDFRLRPQSLNGSDYGGDIPIIPDLEEVQEEFVLQVA APPSIQIKRVMTYRDLNDLMKYSAIQTLDDGEIDLKLLTKVLAP EHEVRERNPSWQDDVGDWDHFLTEVSSEVLTEWDPLQTEKEDP AGQARHT |
| 6515 | 1345 | 305 | GRVGSRRRGAAVPGCCGAGSTQLEVSASASCGALGSADNMPIV VHGGGAGPISKDRKERVHQMVRATVGYGILREGGSADVAVEG AVVALEDDPEFNAGCGSVLNTNGEVEMDASIMDKDLSAGAVSA VQCIANPIKLARLVMEKTPHCFLTDDQGAQFAAAMGVPEIPGEK LVTERNKKRLEKEKHEKGAQKTDCKNLGTVGAVALDCKGNVAY ATSTGGIVNKMVGRVGDSPCLGAGGYADNDIGAVSTTGHGESIL KVNLRALTLEFHEQGXVBEADLSLGYMKSRVKGGLGLIVVSK TGQWVAKWTSTSMFWAAAKDGKLFHFGIDPDDTTITDLP |
| 6516 | 1 | 1402 | FRRLRYLGQDATAAARDLRTGLQGYCPSATARQQVLVSALQQL KGRRSEHRNENQEMPYSTNKLILGIMVGTAGISLLLLWYHKVR KPGIAMKLEFLSLGNTFNSITLQDEIHDDQGTIVIFQERQIQI LEKLNELLTNMEELKEIRPLKEAIPKLEEYIQDELGGKITVHK ISPQHRARKRLPTIQSSATSNSEAESEGGYITANTDTEEQS |

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|------------|--|--|---|
| | | | FPVPKAFNTRVEELNLDVLLQKVDHLRMSESGKSESFELLRDHK EKFRDEIEFMRWFARAYGDMYELSTNTQEKKHANIGKTLSERA INRAPMNGHCHLWYAVLCGYVSEFEGLOKINYGHLFKEHLDIA IKLLPEEPFLYYLKGRYCYTVSKLSWIEKKMAATLFGKIPSSV QEALHNFLKAEELCPGYSNPNMYLAKCYTDLEENQNALKFCNL ALLLPTVTKEDKEAQKEMQKIMTSLKR |
| 6517 | 3 | 1414 | GRVVGSSSLNAMVYVRGHAEDYERWQQRGARGWDYAHCLPYFR KAGQHELGAIRYRGADGFLRVSRGKTNHPLHCAFLATQQAGYP LTEDMNGFQOEGFGWMDMTIHEGKRWSAACAYLHPALSRTNLKA EATLVSRLVFEGRVAVGVYVKNQSHRAYASKEVILSGGAIN SPQLMLSGIGNADDLKLGIPVVCVHLPVGVQNLQDHLBIYIQ ACTRPITLHSAQKPLRKVCIGLEWLKFTGEGATAHLETGGFIR SQPGVPHPDIQFHLPSQVIDHGRVPTQEEAYQVHVGPWRGTSV GWLKLSANPDHFPVQPNYLSTETDIEDFRLCVKLTREIFAQE ALAPFRGKELQPGSHIQSDKEIDAFVRAKADSAYHPSCTCKMGQ PSDPTAVVDPQTRVLGVENLRVVDASIMPSMVSGNLNAPTIMIA EKAADIIKGQPALNDKDVVYKPRTLATQR |
| 6518 | 242 | 1098 | PAWNPGESEPRTRVRPRARSFPLPPPRPRRRRHLLRAVPGPSR RHRCRRRAPPPSTMGDAGSERSKAPSLPPRCPCGFWGSSKTMN LCSKCFADFQKKQPDSDSAPSTNSQSDLFSEETSDNNNTSIT TPTLSPSQQLPTELNVTSPSKEECGCTDTAHVSLITPTKRSC GTDSQSENEASPVKRPRLLENTERSEETSRSKQSRRCFCQQT KLELVQQLGSCRCGYVFCMLHRLPEQHDCTFDHMGGRGEEAIM KMKLDRKVGSRQRIEGGCS |
| 6519 | 3 | 1113 | BRKMAEPPSPVHCVAAAAPTATVSEKEPFGKLQLSSRDPPGSL AKKVRTEKKAPRRVNGEGSGGNSRQLQPPAAPSQSYGSPAS WSFAPLSAAPSPPSSRSSFSFSAGTAVPSSASASLSQPGPRKLL VPFTLLHAQPHHLLLPAAAAASANAKSRPKKREKERRRHGL GGAREAGGASREENGVEVKPLPRDKIKDKIKERDKEKEREKKHK VMNEIKKENGVEVKILLKSGKEKPKTNIEDLQIKKVKKKKKKKHK ENEKRRPKMYKSIQITICSGLLTDVEDQAAGILNDNIKDYVG KNLDTKNYDSKIPENSEFFVSLKEPRVQNNLRLDTLBFKQLI HIEHQPNGGASVHCLQ |
| 6520 | 3 | 1113 | BRKMAEPPSPVHCVAAAAPTATVSEKEPFGKLQLSSRDPPGSL AKKVRTEKKAPRRVNGEGSGGNSRQLQPPAAPSQSYGSPAS WSFAPLSAAPSPPSSRSSFSFSAGTAVPSSASASLSQPGPRKLL VPFTLLHAQPHHLLLPAAAAASANAKSRPKKREKERRRHGL GGAREAGGASREENGVEVKPLPRDKIKDKIKERDKEKEREKKHK VMNEIKKENGVEVKILLKSGKEKPKTNIEDLQIKKVKKKKKKKHK ENEKRRPKMYKSIQITICSGLLTDVEDQAAGILNDNIKDYVG KNLDTKNYDSKIPENSEFFVSLKEPRVQNNLRLDTLBFKQLI HIEHQPNGGASVHCLQ |
| 6521 | 184 | 1798 | KLFKMATDTSQGLVHPKALPLIVGAQLIHADKLGEKVEDSTMP IRRTVNSTRETTPPKSLAEGEEKEPDISSESVSTVEEQENE TPPATSSAEQPKGEPENEKEENKSEETKDEKQSKKEKK VKKTIPSWATLSASQLARAQQTPMASSPRPKMDAILTEAIKAC FOXSGASVVAIRKYIIHKYPSLELERRGYLLKQALKRELNIRGVI KQVKGKAGSGSFVVVQKSRKTPQKSRNRKNRSSAVDPEPQVKLE DVLPLAFTRLCEPKEASYSILIRKYVSQYYPKLRVDIRPQLLKNA LQRAVERGQLEQITGKGASGTFQLKKSKEKPLGSGSLMEYAILS AIAAMNEPKTCSTTALKKYVLENHPGTNSNYQMHLLKKTLOKCE KNGWMEQISGKFGSGTFQLCFPPYPSPGVLPKKEPDDSDREDE DEDESSEEDSEDEPPPKRRLQKKTPAKSPGKAASVKQSGSKPA PKVSAQQRGKARPLPKKAPPAKTPAKKTRPSSTVIKPKSGGSS KKPATSAKE |
| 6522 | 1042 | 391 | NKWLRSRPSRSHRTPESEGRVLSLFRLLPPPGMALSGSTPAPCWEED |

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|------------|--|--|--|
| | | | ECLDYVGMLSLHRMFVVGQQLTECELELLAFLLDAPGAAGGLSRARSGKLKLLLELERRGQCDESNLRLLGQLLRVLARHDLPLHLARKRRRPFVSPERYSYGTSSSSKRTGSCRRRRQSSSSANSQQGSPPTKRQRSSRGPRSGGARRRRRGPPHPSSSQSPDDLPLKAK |
| 6523 | 2 | 1097 | ASQCRRRTAALDSGERIAGRRSPIALAMASNFDIVKQGYVKIRSRKLGIFRRCWLVFKKASSKGPRRLEKFPDEKAAAYFRNFHKVTELHNINKNITRLPRETKKHAVAIIFHDETSKTFACESELEAEWC KHLCECLGTRLNDISLGEPLDLAGVQREQNERFNVYLMPTPNLDIYGECTMQITHENIYLWDIHNKVKLVWVPLSSLRRYGRDSTWTFESGRMCDTGEGLFTFTQREGEMIQKVHSATLAIABQHERLMLEMEQKARLQTSLETPMTLSKSI SLPR SAYWHITRQNSVGEIYSLQGNHENRHSDLTGKSCKTSENRFLBENAPLVMYGITHHLFMDTSTCKVVHDL |
| 6524 | 2 | 1097 | ASQCRRRTAALDSGERIAGRRSPIALAMASNFDIVKQGYVKIRSRKLGIFRRCWLVFKKASSKGPRRLEKFPDEKAAAYFRNFHKVTELHNINKNITRLPRETKKHAVAIIFHDETSKTFACESELEAEWC KHLCECLGTRLNDISLGEPLDLAGVQREQNERFNVYLMPTPNLDIYGECTMQITHENIYLWDIHNKVKLVWVPLSSLRRYGRDSTWTFESGRMCDTGEGLFTFTQREGEMIQKVHSATLAIABQHERLMLEMEQKARLQTSLETPMTLSKSI SLPR SAYWHITRQNSVGEIYSLQGNHENRHSDLTGKSCKTSENRFLBENAPLVMYGITHHLFMDTSTCKVVHDL |
| 6525 | 1 | 1859 | GESPFSEEESEIEFNPSSSGRSARTVSSNSFCDDTGWPSSQSVSPVKTPSDAGNSPIGFCPGSDEGFTRKCTIGMVGEQSIQSSRYKESKSGLVKPGSEADOFSSSSSTGSI SAPEVHMSTAGSKRSSSRNRGPHGRSNGASSHKPGSSPSPREKDLLSMLCRNQLSPVNIHPSYAPSSPSSSSNSGYSKSDCSPIMRRSGRYMSCGENHGVPPNP EQYLTPLQKEVTVRHLKTKLKESEERLHERSEIVEKSLQAR MREDWIEEBCHRVQAQLALKEARKEIKQLKQVIETMRSSLADKD KGIQKYFVDINIQNKLESLLQSMEMAHSGSLRDELCLDFPCDS FEKSLTLNFPDLTMADGLSLEEQVTGEGADRELLVGDSTIANSTD LFDEIVTATTESGDLELVHSTPGANVLELLPIVMGQEEGSVV ERVQTDVVPYSPAISELIQSVLQKLQDPCPSSSLASPDSEPDPS MESFPESLSALVVDLTPRNPNSAILSPVETPYANVDAEVHANR LMRELDFAACVEERLDGVIPLARGGVVRQYWSSSFLVDLLAVAPVVPTVLWAFSTQRGGTDPVYNIGALLRGCCVVALHSLRRTAFRIKT |
| 6526 | 2 | 2034 | SGRAGEPEEWRGRQIIDSKETWIPFNSEDSQQLLEAYSSGKGCN GRVVPFTDGGRYDVHLGERMRYAVYWD ELASEVRRCTWFYKGDKNKYVPYSESFSQVLBEETMYLAVTLDWKKKLESNREIILHNP KLMVHYQPVAGSDDWGSTPMEQGRPRTVKRGVENISVDIHCGEP LQIDHLVFVHVGIGPACDLRFRSIVQCVDNFRSVSLNLLQTHFK KAQENQQIGRVEFLPVNWHSPHSTGVDVLDLQRTLP SINRLRH FINDTILDVFFYNSTPYCQTIQVDTVASEMNRIYTLFLQRNPDFK GGVSIAGHSLGSLILEFDILTNOKDSLGDIDSEKGSINIVMDQGD TPTLEEDLKLQLSEFFDI FEKEKVDKEALALCTDRDLQETIGIP LGPRKKILNYFSTRKNSMGIKRPAPQASGANIPKESEFCSSSN TRNGDYLDVGIGQVSVKYPRLIYKPEIFFAFGSPIGMELTVRGL KRIDPNYRFPCTCKGFENIYHPFDPVAYRIEPMVVPVGEFEPMLI PHHKGRKRMHLELREGLTRMSMDLKNVLLGSLRMAWKSFTRAPY PALQASETPETEAEPESTSEKPSDVNTEETSVAVKEEVLPINV GMLNGGQRIDYVLQEKPIESFNEYLFALQSHLCYWESEDTVLLV LKEIYQTQGIPLDQPLQ |
| 6527 | 1 | 922 | GWVFLSRILPSDAKCIYKQGINIRLDTTLIDFTDMKCQRGDL SFIENGDAAPSESFVVL DNEQKVYQRIHHEESEMETEEEDVILMS SDIYSATLSTKSISFTRAQTGWLFREDKTERVGNFLADFYLVNG |

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|------------|--|--|---|
| 6528 | 1 | 1073 | LVLESRRRREHLSEEDILRNKAIMESLSKGGNIMEQNFEPIRRO SLTPPPQNTITWEYISAENGKAPHLGRELVCESKKTFKATIA MSQEFPLGIELLLNVLEVVPFKHFNKLREFVQMKLPPGFPVKL DIPVFPITITATVTTFQEFYDEFDGSIPTIPDDYKEDPSRPPDL LTGPAAAEPRCAADAGMKRALGRRKGWVLRRLKILFCVGLGYIA IPFLIKLCPGIQAKLIFLNFRVVPYFIDLKKPDQGLNHTCNVY LQPEEDVTIGVWHTVPAVWVKNAQGGKQMWYEDALASSHPILY LHGNAGTRGGDHRVELYKVLSSLGYPVVTFDYRGWGDVSGTPSE RGMTYDALHVDFWDIKARSGDNVPIYIWHGSLGTGVATNLVRLCE RETTPDALILESPTNIREAKSHPPFSVIYRYFPFGDFWFLDPI TSSGKIFANDENVKHISCPILLHAEDDPVVPFQLGRKLYSIAA PARSFRDFKVQFVPFHSDLGYRHKYIYKSPELPRILREPLGKSE PEHQH |
| 6529 | 363 | 2215 | THIRYNKIGVVKMTSCGNEFVETLKKIGYPKADNLNGEDFDWLF EGVEDSEFLKWFQGNVNEQNVLSERELEAFSILQKSGKPILEGA ALDBALKTCKTSDLKTPLRDDKELEKLEDEVQTLKLNKIKQR RNKQQLMASVTSKSLRLNAKEEATKKLKQSQGILNAMITKIS NELQALTDEVTLQMMFFRHSNLGQGTNPVFLSQFSLEKYLQSE EQSTAALTLYTKQFFQGIHEVVESSNESQFFNFKIQTPSICD NQEILEERLEMARLQLAYICAHQLIHLKASNSMKSISKWAE ESLSHLSLTKAVDKENLDKISSLTSEIMKLEKVTQIKDRSLPA VRENAQLLMPVVKGDFDLQIAKQDYITARQELVNLQIKQKA SFELLQLSYEIELRKHRIYQLENLVQELSQSNMMLYKQLEML TDPVSQQINPRNTIDTKDYSTRHYQVLEGENKKKELFLTHGN LEEVAELKQNISLVQDQLAVSAQEHSSFFLSKRKNDVMDLCDTL YQGGNQLLLSDQELTEQPHKVESQLNKLNLHLLTDILADVTKRK TLANNKLHQMEREFYVYFLKDEDYLDKDIVENLETQSKIKAVSLZ D |
| 6530 | 128 | 2986 | GAAHGGAIVQVHPLLPSSSTIMIHDLCLVFPAPAKAVVYVSDIQ ELYIRVVDKVEIGTKVYVRLDLHKKPFLAKYFFPMDLKLRA ASPIITLVALDEALDNYTITFLIRGVAIGQTSLTASVTNKAQOR INSAPQQIEVFPPFRLMPKVTLLIGATMQVTSBGGPQPOSNIL FSISNESVALVSAAGLVQGLAIGNGTVSGLVQAVDAETGKVVII SQDLVQVEVLLRAVRIRAPIMRMRTGTQMPIYVTGITNHQNP SFGNAVPGTLFHWSTKRDVLDLRGRHHEASIRLPSQYNFAMNV LGRVKGRTGLRAVVKAVDPTSGQLYGLARELSDEIQVQVPEKLQ LLNPEIEAEQILMSPNYSYIKLQTNRDGAASLSYRVLDDGPEKVPV VHVEKGFSLAGSMIGTSTIEVIAQEPFGANQTIIVAVKVSFVS YLRVMSFVLHTQNKALVAVPLGMTVFTTVHFHDSGDFPHAH SSVLNPFATNRDDFVQIGKGTNNTCVVRTVSGLTLLRVWDAKH PGLSDFMPLPVLQAI SPESLGAMVVGDLCLATVLTSLGLSGT WSSSANSILHIDPKTGAVARAVGSVTVYEVAGHLRTYKEVVV SVPQRIMARHLHPIQTSFQBATASKVIVAVGDRSSNLRGECTPT QREVIQALHPETLISCSQSKPAVDFDPSQDVFTVEPQFD TALG QVFCSTIMHRLTDKQRKHLMSKKTALVVSASLSSSHFSTEQVGA EVPFSPGLFADQAEILLNHYTSSEIRVFGAPEVLENLEVKSGL PAVLFAKEKSGWPSFITYTVGVLDPAAGSQGLSTTLTFSSP VINQAIAPVTIVAPVVDRRGPGPYGASLFGHFLDSYQVMFFTLF ALLAGTAVMIIAYHTVCTPRDLAVPAALT PRASPGHS PHYFAAS SPTSPNALPPARKASPPSGLWSPAYASH |
| 6531 | 845 | 1425 | PSASIPPSASDPVDPDIRTCHFCVLEDPSVGCISGSEKCTISSS SLCMVITIYDVVRFIVRGCGQYISYRCQEKRTYFAEYWYQA QCCQYDYCNSSWPQLQSSLEPHDRPLALPLSDSQIQWIFYQAL NLSLPLPNFHAGTEPDGLDPMVTLNLNLGLSFALRRMYLFLNS SGLLVLPQAGLLTPHPS |
| 6532 | 2 | 954 | AAGPPSEVVNQDSLFFPEPEPGAPQVLLGPGQGLIKGVAPPTL |

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|------------|--|--|---|
| | | | ITDSTGTHLVLTVTNKNHSPGLSRGSPQQPSSQPGSFAPAPSA QMDLEHPLQPLFGTPTSLKKKEPPGYEEAMSQQPKQENGSSSQ QMDDLFDILIQSGEISADFKPEPSPSLPGKEKPSKPTVCWSPLAAQ PSPSAELPQAAPPPPGSPSLPGRLEDFLESSTGLPLLTSGHDGP EPLSLIDDLHSQMLSSTAILDHPPSPMDTSELHFVPEPSSMTGL DLADGHLDSMDWLELSSGGPVLSLAPLSTTAPSLFSTDFLDGHD LQLHWDSCS |
| 6533 | 1798 | 373 | STISWLARVEPPRRSSGVGAARLRFPGGSRPLRARACVLALAVL ALLERNMADSMSAHSMLCERIAIAKELIKRAESLSRSRKGKIEG GAKLCSKLKAEKFLQKVEAGKVAIKESHLOSTNLTHLRAIVES AENLEEVSVVLHVFYGTDTLGEKQTLVVDDVANGGHTVWKAIGR KAEALHNIWLGRGQYGDKSIEQAEDFLQASHQQPVQYSNPHII FAFYNSVSSPMAEKLKEMGISVRGDIVAVNALLDHPEELQPSSES ESDDEGPPELLQVTRVDRENILASVAFPTBIKVVDVCKRVNLDITT LITYVSALSYGGCHFIKFKVLTEQAEQERKEQVLPQLEAFMKD KELFACESAVKDFQSILDTLGGPGERERATVLIKRINVVDQPS ERALRLVASSKINSRSLTIFGTGDTLKAITMTANSFVRAANNO GVKFSVFIHQPRALTESKEALATPLPKDYTTDSEH |
| 6534 | 47 | 596 | KATRFISAAPVVLNKGQVSPAKLPHTSWSLSLQTLFSLFGDLA EKSQCFPCSAMLELIPLLGIHFVLTARASQSVTQPDIIHITVS EGASLELRNCNYSYGATPYLFWMERTVEEAFILLVCLKPWRVASS LEKKEKEDESFQLLGSRYNVLKAHCLLPLIRWLTSGDSLSAQ PHCPQGL |
| 6535 | 250 | 964 | LIKTFFRDVAIQRDLLPKKKNLETLTLTAFLAIDKAFSSSHARLS ADATLLTSGTTATVALLRDGIELVVASVGDSRAILCRKGKPMKL TIDHTPERKDEKERIKKCGGFVAWNSLGQPHVNGRLAMTRSIGD LDLKTSQVIAEPETKRIKLHADDSSFLVLTDDGINFMVNSQEIW DFVNQCHDPNEAAHAVTEQAIQYGTEDNSTAVVVPFGAWGKYKN SEINFSSRSFASSGRWA |
| 6536 | 242 | 1174 | SLVKEMTNQYGLIFKQEQAHDDAIVSWAGTNKKENSETVVTGS LDDLKVKVWKRDRERLDLQWSLEGHQGVVSDISHTLPIAASS LDAHIRLWDLENGKQIKSIDAGPVDATLAFSPDSQYLATGTHV GKVNIFGVESGKKEYSLDTRGKFILSIAYSPDGKYLASGAIDGI INIFDIATGKLLHTLEGHAMP IRSLTSPDSQLLVTAADDGYIK IYDVQHANLAGTSLGHASWVLNVAFCDPDDTHFVSSSDKSVKVV DVGTRTCVHTFFDHQDQVWGVKYNNGSKIVSVGDDQEIHIYDC PI |
| 6537 | 1638 | 921 | NRFNPPPTQGPDESLVYRPDVPDEVAKDASFRNYTSGPLLDREV FTTYKLMHTHTQTVDFVRSKHAQFGGFSYKMTVMEAVDLLDGLV DESDPPVDFFPNSFHAFTAGIRKAHPDKDWFHLVGLLHDLGKV LALFGEPCQWAVVGDTPFVGCPRQASVVFCDSTFQDNPDLDQPRY STELGMYQPHCGLDRLVMSWGHGGEARGGQWGGGGRWGTVGGGG AEAVPAGDTLSPQSTCTR |
| 6538 | 3345 | 2412 | PYLYDFLDALITCQTAPEEAFIKLDGLAGMLTEQLRRLTKQVQE ARHNRDDEAIKKAUNEYDETMKEYIPVLMQAQKIYWNLENYPMV EKI FRKSVEFCNDHDVWKLNVAVLFMQENKYKEAIGFYEPVVK KHYDNILNVSAILVLANLCVSYIMTSQNEKAELMRKIEKEEBQL SYDDPNRKMVHLCIVNLVIGTLYCAKGNIEFGISRVIKSLEPNY KKLGTDTWYAKRCFLSLENMSKHMIVIHDSVIQECVQFLGHC ELYGTNIPAVIEQPLEEERMHVGNKNTVTDESRLKALIYRIIGW NK |
| 6539 | 218 | 339 | FLGAASPHPHFSSSLAPHPDQPEFTPVQDELEAMELWGPV |
| 6540 | 3 | 391 | LERLWLLLRPEDEMAECPTLGEAVTDHDPRLWAWKFFVYLDE KQHAWLPLTIEIKDRQLQRLVLLRRDVLVLRPMTPTQIGPSLLP IMWQLYPDGRYRSSDSSFWRVYHIKIDGVEDMLLELLPDD |

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|------------|--|--|--|
| 6541 | 1165 | 536 | RTLVRRIILMLLRKPARGRDLGRGRGTTPRGGRKGLLPTPDEFP RFEGGRKPDSDWGNREPGPGHEHFRDTPRDPHPHDGHSASRE RSSSLQGMMDASLPKRKPWHGPGTSEHREMEAPGGPSEDRGG KGRGGPGPAQRVPKSGRSSSLDGEHHDGYHRDEFPGGPPGSGT SRGGRSGSNWGRGSMNSGPPRRGASRGGGRGR |
| 6542 | 3 | 3775 | SWPRGRGETGGHPGALRTRTMQKSVRYNEGHALYLAFLARKEGT KRGFLSKKTAESRWHEKWPALYQNVLFYFEGEQSCRPAQMYLL EGCSCERTPAPPAGAGQGGVRDALDKQYYFTVLFHGEGQKPLE LRCEEEQDGKEWMEAIHQASYADILIEREVLMMQKYIHLVQIVBT EKIAANQLRHQLEDQDTEIERLKSEI IALNKTKERMRPYQSNQE DEDPDIKKIKKVQSFMRGWLCKRKWKTIQDYICSPHAESMRKR NQIVFTMVEAESEYVHQYILVNGFLRPLRMAASSKKPPISHDD VSSIPLNSETIMFLHEIFHQGLKARIANWPTLILADLFDILLPM LNIYQEFVRNHQYLSQVLNCKQNRDQDKLLKQYEANPACEGRM LETFLTYPMFQIPRYITLHELLAHTPEHVERKSLFAKSKLE ELSRVMHDEVSDTENIRKNLAIERMIVEGCDILLDTSTQTFIRQG SLIQVPSVERGKLSKVRGSLSLKKEGERQCFLFTKHFLICTRS SGGKLLHLKTGGVLSLIDCTLIEEPDASDDSKSGSQGVFGLHDF KIVVEPPDRAAFTVLLAPSRQEKAAWMSDISQVDNIRCNGLM TIVFEENSKVTVPBMKSDARLHKDDTDICFSKTLNSCKVPQIR YASVERLLERLTLRFLSIDFLNTFLHTYRIFTTAAVVLGKLS IYKRPFTSIPVRSLELFFATSONNRGEHLVDGKSPRLCRKFSSP PPLAVSRTSSPVRARKLSLTSPLNSKIGALDLTSSSPPTTTQS PAASPPPHGTQIPLDLSRGLSSPEQSPGTVEENVNPRVDLCNK LKRSIQKAVLESAPADRAGVESSPAADTTLSPCRSPTPRHLR YRQPGGQTADNAHCSVSPASAFIATAAAGHGSPPGFNNTERTC DKEFI IRRATNRVLNLRHWSKHAQDFELNNELKMNVLNLE EVLDPDILLPQERKAAANILMALSQDDDDIHLKLEDI IQMTDC MKAECFESLSAMELAEQITLLDHVIFRSIPYEEFLGQGWMLDK NERTPYIMKTSQHFNDSNLVASQIMNYADVSSRANAIEKWVAV ADICRCLHNYNGVLEITSALNRSATYRLKKTWAKVSKQTKALMD KLQKTVSSEGRFKNLRETLKNCNPPAVPYLGMVLTDLAFIEEGT PNFTEGLVNFVSKMRMISHI IREIRQFQQTSTYRIDHQKVAQYL LDKDLI IDEDTLVELSLKIEPRLPA |
| 6543 | 1857 | 950 | FVSGCGRAGIGLSWAMAAEARVSRWYFGGLASCGAACCTHPLDL LKVHLQTOQEVKLRMTGMALRVVRTDGILALYSGLSASLCRQMT YSLTRFAIYETVRDRVAKSGQGPLPFHEKVLGSGVSLAGGFVG TPADLVNVRMNDVKLPQGGRRNYAHALDGLYRVAREEGLRRL SGATMASSRGALVTGQLSCYDQAKQLVLSTGYLSDNIFTHFVA SFIAGGCATFLCQPLDVLKTRLMNSKGEYQGVFHCVAETAKLGP LAFYKGLVPAGIRLIPHTVLTFFVLEQLRKNFGIKVPS |
| 6544 | 630 | 79 | PSPCFIRSRLDGQPMAGLEAWLSQNFSLHQPQSRVRVRRASIS EPSDTPPEPRTLNPSAGWVQOHPLELMSSFRERFGRNWLQY RSHLEPSGNPLPATPTTSAPSAPPASSQGPDTAFRPPSPQEAR GPQESPQKMSEEVRAEPQEEEEKEGKEKEEGEMAPLPEAHIG EGKQKECP |
| 6545 | 176 | 560 | PPHSHAALLPAAMTPLLTLILVVLMLPLAQALDCHVCAYNGDN CFNPMRCPAMVAYCMTTRTYTPTRMKVSCKVPCFETVYDGY SKHASTTSCCQYDLNGTGLATPATLALAPILLATLWGLL |
| 6546 | 1657 | 364 | HLLNGLDEVAFFVADLGATVRKHFCFLKCLPRVRPFYAVKCN SPGVKVLQAQLGLGFSKANKAEMELVQHIGIPASKI I CANPCKQ IAQIKYAAKHGIQLLSFDNEMELAKVVKSHPSAKMVLCIATDDS HSLSCLSLKFGVSLKSCRHLLNNAKKHHEVVGVSFHIGSGCPD POAYAQS IADARLVFEMGTELGHKMHVLDLGGGFPGTEGAKVRF EETASVINSALDYFPEGCGVDI FAELEGYYVTSFTVAVSIIA KKEVLLDQPGREEENGSTSKTIVYHLDEGVYGFNSVLPDNI CP |

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|------------|--|--|---|
| | | | TPILQKKPSTEQFLYSSSLWGPVAVDGCDCVAEGLWLPQLHVGDW LVFDNMGAYTVGMGSPFWGTQACHITYAMSRVAVEALRRQLMAA EQEDDVEGVCKPLSCGWEITDTLCVGPVFTPASIM |
| 6547 | 1 | 541 | LHSKYLA PALCSQPGMMRCCRRCCCRQPPHALRPLLLPLVL PPLAAAAAGPNRCDTIYQGFACILRLGDSMGRGGELETICRSW NDFHACASQVLSGCPPEAAAVWESLQEARQAPRPNNLHTLCGA PVHVRERGTGSETNQETLRATAPALPMAPAPLLAALALAYLL RPLA |
| 6548 | 2 | 219 | FVSRLSVRDVRFPTFLGCHGADAMHTDPDYSAAYVPIETDAEDG IKGCGITFTLGKTEVGELKILSRFQNA |
| 6549 | 73 | 1490 | ETGRVCEADARPACGSRSSRRRRKEAAPGIPTPSFSSSSPTSSRPA ARAFSKAPARLSRPRAREEPPDPGRRYIQEEIIQARKHKLIKMC SSVAAKLWFLTDRIREDYPQKEILRALKAKCEEEELDFRAVVM DEVVLTIEQNLGLRINGELITAYPQVVVVVRVPTPWVQSDSDIT VLRHLEKMGCRMLNRPQAILNCVKNFQWTFQELAGHGVPLDPTFS YGGHENFAKMIIDEAEVLEFPMVVKNTRGHRGKAVFLARDXKHLA DLSHLIRHEAPYLFQKYVKESHGRDVRVIVVGGRVVGTMLRCST DGRMQSNCSLGGVGMCSLSEQGQLAIQVSNILGMDVCGIDLL MKDDGSFCVCEANANVGPIAFDKACNLVDAGIADYASLLPSP RLTRMSLLSVVSTASETSEPELGPASTAVDNMSASSSSVSDS PSTERELTLKLPGLFNMQLLANEIKLLVD |
| 6550 | 2293 | 922 | FRVSRDGDGADCGTEQMGLAMEHGGSYARAGSSRGWCYYLRYFF LFVSLIQFLIILGLVLFMVYGNVHVSTESNLOATERRAEGLYSQ LLGLTASQSNLTKEINFTTRAKDAIMQMWLNARRDLDRINASFR QCQGRVITYTNQRYMAAIIILSEKQCRDQFKDMNKS CDALLFML NQKVKTLEVEIAKEKTICTDKESVLLNKRVAEBQLVECVKTR LQHQRQLAKEQLQKVQALCLPLDKDKFEMDLRNLWRDSIIPRS LDNLGYNLYHPLGSELASIRACDHMPSLMSSKVEELARSLRAD IERVARENSDLQOKLEAQOGLRASQEAQKQVKEAQAAREAKLQ AECSROTQLALEKAVLRKERDNLAKELEKKREAEQLRMELAI RNSALDTCTIKTSQPMMPVSRPMGPVPNPQPIDPASLEEFKRI LESQRPAGIPVAPSSG |
| 6551 | 157 | 748 | IQPPDPRNMTLAAYKEKMKELPLVSLFCSCFLADPLNKSSYKYE ADTVDLNWCVISDMEVIELNKCTSGQSFEVILKPPSPDGVPEFN ASLPRRRDPSLEEIQKLEAAEERRKYQEAELLKHLAEKREHER EVIQKAIENNNFIKMAKEKLAQKMESNKENREAHLAAMLERLQ EKDKHAEVVRKNKELKEEASR |
| 6552 | 157 | 748 | IQPPDPRNMTLAAYKEKMKELPLVSLFCSCFLADPLNKSSYKYE ADTVDLNWCVISDMEVIELNKCTSGQSFEVILKPPSPDGVPEFN ASLPRRRDPSLEEIQKLEAAEERRKYQEAELLKHLAEKREHER EVIQKAIENNNFIKMAKEKLAQKMESNKENREAHLAAMLERLQ EKDKHAEVVRKNKELKEEASR |
| 6553 | 2 | 1807 | FVWSKMAAHLISYGRVNLNVLREAVRRELREFLDKAGSKAIVWD BYLTGPFGLIAQYSLLKEHEVEKMTFLKGNRLPAADVKNIIFFV RPRLELMDIIAENVLSEDRRGPTDRDFHILFVPRRSLCEQRLKD LGVLSFIHREBYSLDLIPFDGDLSSMESEGAFFKCYLEGDQTS LYHAAKGLMTLQALYGTIPQIFGKGEARQVANMMIRMKREFTG SQNSIFPVFDNLLLDNRNVDLLTPLATQLTVEGLIDEIYGIQNS YVKLPPEKFAPKKQDGGKDLPTAKKLQNLNSAEELYAETIRDN FNAVGSVLKSKAKIISAFFEERHNAKTVEIKQFVSQPLPHMQAA RGS LANHTSIAELIKDVTTSSEDFDKLTVEQEFMSGIDTDKVN YIEDCIAQKHSILKVLRLVCLQSVCSNGLKQKVLDDYKREILQ YGYEHILT HNLEKAGLLKPQTGGRNNYPTIRKTLRLWMDVNE QNPTDISYVYSYAPLSVRLAQLLSRPGWRSIEEVLRI LEPGPHF EERQPLPTGLQKKRQPGENRVTLIFFLGVTFAETIAALRFLSQL EDGGTEYVIATTKLMNGTSWIEALMEKPF |

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|------------|--|--|---|
| 6554 | 119 | 1244 | FEMGSQSVESGALHVVIVGGGFGGIAAASQLQALNVFMLVDM KDSFHHNVAALRASVETGFAKKTIFISYSVTFKDNFRQQLVVGID LKNQMVLQGGGALPFSHLILATGSTGPPGKFNEVSSQQAIIQ AYEDMVRQVQSRFIVVVGGSAGVEMAAIBIKTEYPEKEVTLIH SQVALADKELLPSVRQEVKEILLRKGVLQLLSERVSNLEELPLN EYREYIKVQTDKGTEVATNLVILCTGKINSSAYRKAFESRLAS SGALRVNEHLQVEGHSNVYAIGDCADVTPKMAVLAGLHANIAV ANIVNSVKQRPLQAYKPGALTFLLSMGRNDGVGQISGFYVGRLM VRLTKSRDLFVSTSWKTMRSPP |
| 6555 | 1552 | 498 | IHMALLRKINQVLLFLLIVTLCVILYKKVHKGTVPKNDADDESE TPEELEEEI PVVICAAAGRMGATMAAINSISNTDANILFYVVG LRNTLTRIRKWIHESKLEINFKIVEFNPMGLKGKIRPDSSRPE LLQPLNFVRFLPLLIHQHEKVIYLDLDDVIVQGDIDQELYDTTLA LGHAAPSDDCDLPSAQDINRLVGLQNTYMGVLDYRKKAIKDLG ISPSTCSFNFPGVIVANMTWEXHQRITKOLEKWMQKNVEENLYSS SLGGGVATSPMLIVFHGKYSTINFLWHIRHLGWNPDARYSEHFL QEAKLLHWNHGRHKPWPDPFVHNDLWESWFPDPAGIFKLNHHS |
| 6556 | 241 | 1449 | ASLCKGCFVTVHVLVITLPSLQSPPTFGFLDDIDGVLVRGHRVI PAALKAFFRLVNSQGLRVVVFVTNAGNIIQHSKAQELSAALLG CEVDADQVILSHSPMKLFSEYHEKRMILVSGGQFVMENAAQGLGFR NVVTVDLRLMAFPLDMVDLERRLKTTPLRNDFPRIEGVLLLG EPVRWETSLQIMDVLLSNGSPGAGLATPPYPHLPVLASNMDLL WMAEAKMPRFHGHTFLLCLETIYQKVTGKELRYEGLMGKPSILT YQYAE DLIRQAERRGWAAPIRKLYAVGDNPMSDVYGANLFHQY LQKATHDGAPELGAGGTROQQPSASQSCISILVCTGVYNPRNPQ STEPVLGGGEPPFHGHRDLCSFPGLEASHVVDVNEAVQLVFR KEGWALE |
| 6557 | 2598 | 1534 | RMCGRTSCHLPRDVLTRACAYQDRRGQRLFEWRDPDKYCPSPYN KSPQSNPVLRLHFEKDADSSERIAPMRWGLVPSWFKESDP SKLQFNTINCRSDTVMEKRSFKVPLGKGRRCVVLADGFYEWQRC QGTNRQRPYFIYFPQIKTEKSGSIGAADSPENWEKVDNWRLLT MAGIFDCWEPPEGGDVLYSYTIITVDSCKGLSDIHRMPAILDG EEAVSKWLDGFEVSTQEALKLIHPTEINITFHAVSSVNNRNNT PECLAPVDLVKKELRASGSSQRMQLQWLATKSPKKEDSKTPQKE ESDVPQWSSQFLQKSPLPTRKGTAGLLEQLKREKEEPVAKRP YSQ |
| 6558 | 21 | 1138 | FHGRRRGGRKMELGSCLEGGREAAEEEGEPEVKRRLLCVEFAS VASCDAAVAQCFLAENDWEMERALNSYFEPPEESALERRPETI SEPKTYVDLTNEETDSTTSKISPSDQEQNGSMFSLITWNID GLDLNLSERARGVCSYLALYSPDVI FLQEVIPPYYSYLKKRSS NYEII TGHEGYFTAIMLKSRVKLSQEIIPFPSTKMNRLLC VHVNVSGNELCLMTSHLESTRGHAAERMNQKMLVKKMQEAPES ATVIFAGDTNLRDREVTTCGGLPNNIVDVWEFLGKPKHCQYTD TQMNSNLGITAAACKLRFDRIFFRAAEBGHII PRSLDLLGLEKL DCGRFPDHWGLLCNLDIIL |
| 6559 | 3 | 364 | GPESGLPTRPKLKANQTFIAMDCCASRSCSVPTGPATTICSS DKSCRCGVCLPSTCPHTVWLEPTCCDNCPPPCHPQPCVPTCF LLNSCQPTPGLTINLTFTTQPCCEPCLPRGC |
| 6560 | 3 | 1435 | TATSGGIWLRKRWCHWRPLPQSCVGTGGGLQVRDTSRIAKG GVDHTKMSLHGASGGHERSRDRRSSDRSDSSHERTESQLTPC IRNVTSPTQRHHVEREKDHSSSRPSSRPQKASPNGISAGNS SRNSSQSSSDGCKTAGEMVVFYENAKEGARNIRTSERVTLIVD NTRFVVDPSIFTAQPNMLGRMFGSGREHNFTRPNEKGEYEVAE GIGSTVFRAILDYKGTGIRCPDGISIPELREACDYLCISFEYS TIKCRDLSALMHLSNDGARRQFEFYLEEMILPLMVASAQSGER ECHIVVLTDDDDVVDWDEEYPPQMGEYSQIIYSTKLYRFKYIE |

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|------------|--|--|--|
| | | | NRDVAKSVLKERGLKKIRLGIEGYPTYKEKVKRPGGRPEVIYN YVQRPFFIRMSWEKEEGKSRHVDFOCVKSKSITNLAAAADIPQD QLVVMHPTPQVDELDILPIHPPSGNSDLDPDAQNPML |
| 6561 | 3 | 1086 | PGRFRFRKESSSSRWFPADCLLGLRGPASSLLSPSPSPWSPHS PCPMAALTDLSFMYRNFKCNLVGNLSEKYVFTGCDSGFGNLL AKQLVDRGMQVLAACFTEEGSQKLQRDTSYRLQTTLLDVTKSES IKAAQWVRDKVGEQGLWALVNNAGVGLPSGPNWLTKDDFVKV INVNLVGLIZVTLHMLPMVKRARGRVNMSSSGRVAVIGGGYC VSKFGVEAFSDSIRRELYYFGVKVCIIEPGNYRTAILGKENLES RMRKLWERLPQETRDSYGEDYFRITYDKLKNIMQVAFPRVRDVI NSMEHAIVSRSPRIRYNPGLDAKLLYIPLAKLPTPTDFILSRV LPRPADSV |
| 6562 | 1 | 1562 | MSTLYDIRAHKAQLLRFFASSDSNKALEQRRLHTPKLEHLDRV LYEWFGLKRSEGVFVSGPMLIEKAKDFYEQMLTEPCVFSGGWL WRFKARHGIKKLDASSEKQSDADHQAABQCAFFRSLAAEHGLSA EQVYNADETGLFWRCPLNPPTPEGGA VPGPKQKDRILTVMCANA TGSRLKPLAIGKCSGPRAFKGIQHLFVAYKAQGNWVDKEIFS DWFHHIFVPSVREHFRITIGLPEDSKAVLLLDSSRAHPQEAELVS SNVFTIFLPASVASLVQPMEQGIRRD FMRNF INPFPVPLQGGPHAR YMNDAI FSVACAWNAPSHVFRRAWKRLWPSVAFAGSSSEEE LEAECFPVKPHNKSFAHILELVKEGSSCPQLRQQAASWGVAG REAEGRPPAATSPA EVVWSSEKTPKADQDGRGDPGEGEVAVE QAAVAFDAVLRFAERQPCFSAQEVGQLRALRAVFRSQQVRRRR GALGAVVKVEALQEGPGGCGATAQSFLPCSSTAGDN |
| 6563 | 1319 | 2694 | LARPAQPVLLREPEGAGFPVPAGHLVHHLQGGHRLRERAHDPLEA HEHPLPCDQMFWRQMGHLMVNEANSRGVWVGIGYDHTAWVYT GYGGGCFQGLASSTSNITYTQSDVKCVHIYENQRWNPVTGYTSRG LPTDRYMWDASGLQECTKAGTKPSPQLQWAWVSDWFDVFSVPGG TDQEGWQVADFPASYHGSKTMKDFVRRRCWARKCLVTSGPWL EVPPIALRDVSIIPESPGAEGSGHSIALWAVSDKGDVLCRLGVS BLNPAGSSWLHVGTDPFASISIGACYQVWAVARDGSAFYRGVS YPSQPADGCWYHIPSPPRQLKQVSAGQTSVYALDENGNLWYRQ GITPSYPOGSSWEHVSNNVCRVSVGPLDQVWVIANKVQGSLSLS RGTVCHRTGVQPHPKGHGWDYIGIGGGWDHISVRANATRAPRSS SQEQEPSAPPEAHGPVCC |
| 6564 | 1 | 975 | APGSCALWSYCGRGWSRAMRGQQLLGLRSSWPGDLLSARLLSQE KRAAETHFGFETVSEBEKGGKVYQVFESVAKYDVMNDMMSLGI HRVWKDLLLWKMHPLPGTQLLDVAGGTGDI AFRFLNYVQSQHQR KQKRLRAQQNLSWEEIAKEYQNEEDSLGGSRVVVC DINKEMLK VGKQKALAQGYRAGLAWVLGDAEELPFDDDKFDITYIAFGIRNV THIDQALQEAHRVLKPGGRFLCLEFSQVNNPLISRLYDLYSFQV IPVLGEVIAGDWKSYQYLVESIRRFPSQEEFKDMIEDAGFHKVT YESLTSGIVAIHSGFKL |
| 6565 | 1464 | 999 | RSVANGLTKRRLKLNKGRYISLILAVQIAYLVQAVRAAGKCD AVFKGFSDDLKLGDSMANYPQGLDDKTNIKTVCYTWEDPHSCT VTALTDCEGAKDMWDKLRKESKNLNIQGSILFELCGSGNGAAGS LLPAFPVLLVSLAALATWLSF |
| 6566 | 3 | 1385 | KYESAOPGGTQPEPGLGARMATHKALVMCLGLPLFLFPGAWAQQ HVPFGCSQGLNPLYNLCDRSGAWGIVLEAVAGAGIVTTFVLT ILVASLFPVQDTKKRSLGTQVFFLLGLTGLFCLVFACVEKPDF STCASRRFLFGVLFALCFSCLAHVFLNFLARKNHGPRGWVIF TVALLLTVEVIINTEWLIITLVRGSGEGGPQGNSSAGWAVASP CAIANMDFVMALIYVMLLLGAFGLGAWPALCGRYKRWKRGVVFV LLTTATSVAIWVWVIMYTYGNKQHNSTPDDPTLAIALAANAN AFVLFYVIEVVSQVTKSSPQSYQGDMPTRGVGYETILKEQKG QSMFVENKAFSMDEPVAARKRPVSPYSGYNGQLLTSVYQPTMAL |

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|------------|--|--|--|
| | | | MHKVPSEGAIDILPRATANSQVMGSANSTLRADMYSQAQSHQA ATPPKDGKNSQVFRNPYVWD |
| 6567 | 125 | 863 | TKRSNLKAYACSIHHIRTMSYVVFVNDSSQTNVPLQACIDGDFN YSKRLLSEGFDPNIRDSRGRTGLHLAAAGNVDICQLLHKFGAD LLATDYQGNTALHLCGHVDTIQFLVSNGLKIDICNHQGATPLVL AKRRGVNKKDVIRLLESLEEVEVKGFNRGTHSKLEMTQTAESESA MESHSLLNPNLQQEGVLSSFRITWQEFVEDLGFWRVLLLIPIVI ALLSLGIAYVSVGLPFVENQPELVH |
| 6568 | 3 | 1183 | HASDRLLVLPDNYSHFSQASANLQGPSRTTELPHFTLASISSPM LEGAEIYFNVDHGYL.EGLVRGCKASLLTQQDYINLVQCETLEDL KIHLQTTDYGNFLANHTNPLTVSKIDTEMKRRLCGEFYFRNHS LEPLSTFTLYMTCSYIMDNVILLMNGALQKKSVEILGKCHPLG RFTMEAVNIAETPSDLFNAILIETPLAPFFQDCMSENALDELN IELLRNKLKYSYLEAFYKFKKNHGDVTAEVMPPILEFEADRRRAF IITLNSFGTELSKEDRETLPTFGKLYPEGLRLLAQAEFDQOMK NVADHYGVYKPLFEAVGGSGGKTLEDVFYEREVQMNVLAFNRQF HYGVFYAYVKLKEQEIRNIVWIAECISQRHRTKINSYIPIL |
| 6569 | 205 | 1532 | RRRGFPQLRGHGREPTPLLCRWRTAGPSPHWEKQARAFQGLRPVDP RMSWLFPLTKSASSSAGSPGGLTSLQQQKQRLIESLRNHSSTI AEIQKDVYRLPPTINNLTININILLPPQFPQEKPVISVYPPPIR HHLMDKQGVVYTSPLVNNFTMHSDLGKIIQSLLEDFWKNPPVLA PTSTAPPYLYSNPSGMSPYASQGFPLPPYPPQEANRSITSLSV ADTVSSSTTSHTTAKPAAPSFGVLSNLPPIPTVDASIPTSQNG FGYKMPDVPDAFPELSSELSVSLTDMNEQEEVLEQFLTLPLQK QIITDKDLVKSIEELARKNLLLEPSLEAKRQTVLDKYELLTQM KSTFEKKMQRQHELSESCSASALQARLKVAHEAEESDNIAED FLEGKMEIDDFLSSFMKRTICHCRRAKEEKLQQAIAHMSQFHA PL |
| 6570 | 330 | 1304 | ARLPRLTFLREGFLYVLLSHWVFGAPRPPASDSWKGLVPSAP PASRKMGSKALPAPIPLHPSLQLTNYSFLQAVNTFPATVDHLGG LYGLSAVQTMHNNHTLGYPNVHEITRSTITEMAAQGI.VDARF PPFALPFTTHLEHFKQGAIAHVLPAHKKDRPRDFANLAVAATQ EDPPKMGDLSKLSPLGSGPISGLSKLTPDRKPSRGRLPSTKKE FICKFCGRHFTKSYNLLIHERHTHTDERPYTCDICHKAFRRQDHL RDHRYIHSKEKFFKCQECGKGFQCSRTLAVHKTLMQTSSPTAA SSAAKCSGETVICGCT |
| 6571 | 169 | 656 | APDMNRKKLQKLTDTLTKNCKHLFRGFDKNDGCVNVLEWIGHL SLFLRGSLEEKMKYCFEVDLNGDGFISKEEMFHLKNSLLKQP SEEDPDEGIKDLVEITLKKMDHDHDKLSFADYELAVREETLLL EAFGPCLPDPKSQMEFEAQVFKDPNEFNDM |
| 6572 | 49 | 1646 | TPERAQPGALIGAAGCCVCGGRWPRSHERYFSSAKMGSKRRN LSCSERHQKLVDENYCKKLHVQALKNVNSQIRNQMVQNENDNRV QRKQFLRLQNEQFELDMEEAIQKAENKRLKELQLKQEEKLAM ELAKLKHESLKDEKMRQQVRENSIELRELEKKLKAAYMKERAA QIAEKDAIKYEQMKRDAEIAKTMEEHKRIIKEENAAEDKRNKA KAQYVLDLEKQLEBQEKKKQRAYEQLLKEKLMIDEIVRKIYEED QLEKQKLEKMNAMRRYIEEFQEQALWRKKREEMEEENRKII EFANMQQREEDRMKVQENEEKRLQONALTQKLEMLRQRED LEQVRQELYQEEQAEIYKSKLKEAEKKLRKQKEMKQDFEEQMA LKEVLQAAKEEENFRKTMFAEDDRIELMNAQKQRMKQLE HRRAVEKLEERRQQFLADKQRELEEWQLQORRQGFINATIEBE RLKLLKEHATNLLGYLPKGVFKKEDDIDLLGEEFRKYVQQRSEI CEEK |
| 6573 | 767 | 275 | GGGGGESQSFRAQDGTTRPATDCLMYLQGPRLMTQGGYDMVQK LFLDFFRRRLSQRPTAEELQQRNILLKPRNEQEEQEKREIKRRL TRKLSQRPVTEELRERKILIRFSDYVEVADAQDYDRRADKPWTR |

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|------------|--|--|---|
| 6574 | 204 | 1159 | <p>LTAADKVSRGECWRVGGRTVCWVSLGSPLSGV</p> <p>LESSVPVSVGVFWACGVSWTGAAGLQDQALSDTMARNAEKAMTA LARFRQAQLEEGKVKERRRFFLASECTELPKAEKWRRQIIGEIFSK KVAQIQNAGLGEFRIRDLNDEINKLLREKXGHWVRIKELGGPDY GKVGPKMLDHEGKEVPGNRGKYFGAAKDLPGVRELFEKEPLPP PRKTRAEMLKAIDFEYGYLDEDDGVIVPLEQEYKELRAELVE KWKAREARLARGEKEEEEEEEINIYAVTEESDEEGSQEKG GDDSQKFIHVPVPSQOEIEALVRRKKMELLQKYASETLOAQ SEEARLLGY</p> |
| 6575 | 117 | 820 | <p>SPALASQSGGITTEKMLEPQENGVIDLPDYEHVEDETFFPPFPFP ASPERQDGEGETEPDEESGNGAPVPPPKRTVTKRNIPKLDARLI SERGLPALRHVFDKAKFKGKGHEADLKLIRHMEHWAHLRFPK LQFEDPIDRVEYLGSKKEVQTCIKRIRLDLPILHEDEVSNNDV AENNEHDVTS TELDPFLTNLSESEMFASELSISLTEEQQORIER NKQLALERRQAKLP</p> |
| 6576 | 1 | 1060 | <p>PEPQALVGGKRGALRLVARLVLTVSAPAEVRRRRLRPVLSWMD RETRALADSHFRGLGVDVPGVQAPGRVAFVSEPGAFSYADDFVR GELLNPLPCVFSSAFTQGWGSRRRRVWTEAGRPDFDHLRTYGDV VVPVANCQVQEYNSNPKEHMTLRDYITYWKEYIQAGYSSPRGCL YLKDWHLCRDFFVEDVFTLPVYFSSDWLNEFDALDLDVDDYRFVY AGPAGSWSPPHADIFRSFSWSNVNCGRKKWLLFPPGOEALDRDR HGNLPYDVTSPALCDTHLHPRNQLAGPPLITQEAGEMVFPVSG WHHQVHNLVMCCFSCPLSGAFLQEDGSTTSPLSQPELGWNGVAH G</p> |
| 6577 | 2271 | 987 | <p>SDRMASDDPDIVTEAMLEAPYKKEEDEQORKEVKKDYPSTTS TSNSGNETSGSSTIGETSNRSRDRDRYRRNRSRSPGRQCRHR RSWDORRHGSESRSRDHREDRVHYRSPPLATGYRYGHSKSPHF REKSPVREFVDNLSPBERDARTVFCMQLAARIRPRDLEDFSSAV GKVRDVRIISDRNSRRSKGIAYVEFCEIQSVPLAIGLTGQRLG VPIIVQASQAENRLAAMANNLQXGNGGPMRLYVGSLLHFNITD MLRGI FEPFGKIDNIVLMKDSITGRSKGVGFIITFSDSECARAL EQNGFELAGRPMPRVGHVTERLDGGTDITFPDGDQELDLGSAGG RFQLMAKLAEGAGIQLPSTAAAAAQAALQLNGAVPLGA LNPAALTALSPALNLASQCLQLSSLFTPTQM</p> |
| 6578 | 377 | 1489 | <p>PSSSATMNRAPLKRATILHMAITGASDPSAEAEANGKPFLLRA LQIALVVSPLYWTSISMVFLNKYLLDSPSLRLDTPIFVTFFQCL VTLLCKGLSALAACCAGVDFPSLRDLRVARSVLPLSVVFIG MITFNNLCLKYVGVAFYNVGRSLTTFVFNLLSYLLKQTTSFYA LLTCGIIIGGFVLGVDQEGAEGTLSWLGTVFGVLAASLCLVSLNAI YTTKVLPAVDGSIWRLTFYNNVNACILFPLLLLLGELQALRDF AQLGSAHFWGMMTLGGLFGFAIGYVTGLQIKFTSPLTHNVSGTA KACAQTVLAVLYEETKSLWWTSNMMVLGGSSAYTVNRGWEMK KTPEEPSPKDSEKSAMGV</p> |
| 6579 | 2 | 711 | <p>RPPRVVYPELRELSAAPRWSHRTAFGIMVFYFTSSSVNSSAYT IYMGDKYENEDLIKHGWPEDIWFHVDKLSSAHVYLRHLKGENI EDIPKEVLMDCAHLVKANSIQGCKMNNVNVYTPWSNLKKTADM DVGGQIGFHRQKDVKITVEKKVNEILNRLEKTKVERFPDLAEK ECRDREERNEKKAQIQEMKKREEMKKKREMDLRSYSSLMKV ENMSSNQDGNDSDEFM</p> |
| 6580 | 62 | 1571 | <p>LVALKNWPKGTINIPAPQSPVFGEAVSGVYMMTKVLGMAPVLGP RPPQEQVGPLMVKEEKEEGKYLPSLEMFRRQRFQFGYHDTPG PREALSQRLVLCCEWLREPIHTKEQILELLVLEQFLTILPQELQ ANVQEHCPESAEEAVTLEDLERELDEPGHQVSTPPNEQKPVWE KISSSGTAKESPSSMQPLETSHKYESWGPLYIQESGEEQEF QDPRKVRDCRLSTOHEESADEQKGSSEAGLKGDIISVIANKPE ASLERQCVNLENEKGTKPPLQEAGSKKGRESVPTKPTGPERRYI</p> |

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|------------|--|--|---|
| 6581 | 228 | 476 | CAECGKAFSSNNLTGKRRTHTEGKPYVCTKCGKAFSHSSNLT HYRTHLVDRPYDCKCGKAFGQSSDLLKHQRMHTEEPYQCKDCG KAFSGKGLIRHYRIHTGKPYQCNECGKSFQSHAGLSSHQRLH TGEKPYKCEGKAPNHSSNFNKHRIHTGKPYWCHHCCKTFC SKSNLSKHQHVHTGEGEAP |
| 6582 | 1428 | 718 | RVFLKDLSTPMASNNASIAQARKLVEQLKMEANIDRIKVSKA AADLMAYCEAHAKEDPLLTVPVASENPFREKFFCAIL CFTTKTHCSPVSVPYLSPLVLRKELESLENEGDQVIHTSSFIN QHPILFWTLVWYFRRLDLPSNLPGLITSEHCNEGVQLPLSSLS QDSKLVYIQLLDNINLHQEPREPLYVSWRNFNSEKSSLLSEE QQTSTLVETIRQSIQHNNVLKPINLLSQMKPGMKRQRSLYRE ILFLSLVSLGRENIDIEAFDNEYGIAYNSLSSEILERLQKIDAP PSASVEWCRKCFGAPLI |
| 6583 | 487 | 41 | RIFSMTSGRLWRCTWRPATALWSASLRGLTSSMHFSRPSISLP LSMMLSLPSPNTRGLSPTALFRSPDSEHATSCPRHLWRCRAPL RSFSPGLRQLVLPSPPLHVHTHNSGKEVLGLQVQSRSGTGPAC SQAGSGAVQGGNWCIF |
| 6584 | 189 | 1750 | PLPMAALGPSSQNVTEYVVRVPKNTTKKYNIMAFNAADKVNFA WNQARLERDLNKKIYQEEEMPESGAGSEFNRLREBARKKKYG IVLKEFRPEDQPWLLRVNGKSGRKFKGIKKGGVIENTSYIIFTO CPDGAFAEPVHNWYNFTPLARHRTLTAEBAEWEERNKVLNH FSIMQORRLKDDQDEDEEEKEKGRRKASELRIDHLEDDLEMS SDASDASGEEGGRVPAKKKAPLAKGGRKKKKKSGDDEAFEDS DDGDFEGQEVDMSDGSSSSQEEPEKAKAPQEEGPKGVDEQS DSSESESEKPEEDKEEEKKAPTQEKRRKDSSESDSSE ESDIDSEASSAFFMAKKKTPPKRERKPSGSSRGNRPGTPSAE GGSTSTLRAAASKLEQKRVSEMPAAKRLRLDTGPQSLSGKST PQPPSGKTPNSGDVQVTEDAVRRYLTRKEMTTKDLKKFKQTKK TGLSSEQVNVLAQILKRLNPERKMINDKMHFSLKE |
| 6585 | 3 | 1678 | GPIRNSRIDDFVGGDPRAEASCSVLHSEKPHAMADSRDPASDQM HWKEQRAAQKADVLTTGAGNPVGDKLNVITVGRGPLLVDVVF TDEMAHFDRERIPERVVHAKGAGAFGYFEVTHDITKYSKAKVFE HICKKTPIAVRFTVAGESGSADTVDRPRGFAVKFYTEDGNWDL VGNNTPIPFIRDPILPFSFIHSQKRNPQTHLKDPDMVWDFWSLR PESLHQVSFLFSDRGIPDGRHRMNGYGSHTFKLVNANGEAVYCK PHYKTDQGIKNLSVEDAARLSQEDPDYGIRDLEFNAIATGKYP TFYIQVMTFNQAEFFPNFPDLTKVWPHKDYPLIPVGLVLNRRN PVNYFAEVEQIAFDPSNMPPGIEASPKMLQGLRFAYPDTHRRH LGPNYLHIPVNCPIYARVANYQRDGPMDQNDQGGAPNYYPNSF GAPEQQPSALEHSIQYSGEVRRFNTANDDNVTQVRAFYVNVLE EQRKRLCENIAGHLKDAQIFIQKAVKNFTEVHPDYGSHIQALL DKYNAEKPKNAIHTFVQSGSHLAAREKANL |
| 6586 | 32 | 804 | PLPEQPAESTSTMPVSGTPAPNKKRKS KLIMELTGGGQESSGL NLGKKISVPRDVMLEELSLLTNRGSKMFKLRQMRVEKFIYENHP DVFSDDSMDFQKFLPTVGGQLGTAGQGFYSKSNRGSSQAGG SGSAGQYGSDDQHHLGSGSGAGGTGGPAGQAGRGGAAGTAGVE TGSGDQAGGEGKHITVFKTYISPWERAMGVDPPQKMLGIDLLA YGAKAELPKYKSFNRTAMPYGGYEKASKRMTFQMPKV |
| 6587 | 75 | 1117 | RRVPSLGKMPCEWDGEHDIETPYGLLHVIRGSPKGNRPAILTY HDVGLNHKLCFNTFFNFEDMQEITKHVCHVDAPGQQVQASQF PQGYQFPSEQLAAMLPSVVQHFGFKYVIGIGVAGAGAVLAKFA LIFPDLVEGLVLNIDPNGKWDWAATKLSGLTSTLPTDVLSH LFSQEELVNNTLVQSVRQQIGNVVNQANLQLFWNMYNSRRDL INRPGTVPNAKTLRCPVMLVVGDNAPAEQGVVECNKSLDPTTTT FLKMADSGGLPQVTQPKGLTEAFKYPLQGMGYMPSASMTLRARS RTASLTSSASSVDGSRPQACTHSESEGLQVNVHTEVSC |

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|------------|--|--|--|
| 6588 | 137 | 501 | LGLQAQLLELRNNYQLSDELRLKNGVELTSLRQKVAYLDKEFSK AQKALSKSKKAQEVVLLSENEMLOAKLHSQEEDFRLQNSTLMA EFSKLCSEMEQLEQENQOLKEGAAGAGVAQAGP |
| 6589 | 2 | 1405 | RPWGSAMATFSRQEFFQQLLQGCCLPTAQQGLDQIWLALLAICLA CRLWLRLGLPSYLKHAFTVAGGFFSLYHFFQLHMMVWVLLSLLC YLVFLCRHSSHRGVFLSVTLIYLLMGEMHMDVTVTWHKMRGA QMIVAMKAVSLGFDLDRGEVGTVPSPVEFMGYLYFVGTIVFGPW ISFHSYLQAVQGRPLSCRWLQKVARSLALALLCLVLSTCVGPYL PPYFIPLNGDRLLRNKKRKARGTMVRWLRAVESAVSFHFSNYFV GFLSEATATLAGAGFTTEKDHLEWDLTVSKPLNVELPRSMVEV TSWNLPMSYWLNMYVFKNALRLGTFSAVLVTYAASALLHGFSPH LAAVLLSLAFITYVEHVLRLRLILSACVLSKRCPPDCSHQHR LGLGVRLNLLFGALAI FHLAYLGS LFDVDDDTTBEQGYGMAY TVHKWSLSWASHWTFGCWIFYRLIG |
| 6590 | 2177 | 656 | VRAYEHVLSLENVFTPMFCHRDYFRQLLRGAESPTRNSKLN GSLSLDDFRNTQKRGESEFGISRIGSKI KGVFKSTTMEGAMLPNY GVAEGEDDFIEEGIVMEDDSPVEAVSTPNTPRNLAAWKISIPY VDFEEDPSSERKEKKERI PVFCIDVERNDRRAVGHEPEHWSVYR RYLEFYVLESKLTEFHGAFFDAQLPSKRIIGPKNYEFLKSREE FQEYLQKLLQHPELSNSQLLADFLSPNGGETQFLDKILPDVNLG KIIKSVPGKLMKEKGQHLPEFIMNFINSCESPKPKPSRPELTIL SPTSENNKKLFNDLFKNANRAENTERKQONQYFMEVMTVEGVY DYLMYVGRVVFQVPDWLHLLMGTRILFKNTLEMYTDYYLOCKL EQLFQEHRLVSLITLLRDAIFCENTEPRSLQDKQKAGKQTFEEM MNYIPDLLVKCIGEETKYESIRLLFDGLQQPVLNKLTYVLLDI VIQELFPELNVKQKEVTSVTSWM |
| 6591 | 2177 | 656 | VRAYEHVLSLENVFTPMFCHRDYFRQLLRGAESPTRNSKLN GSLSLDDFRNTQKRGESEFGISRIGSKI KGVFKSTTMEGAMLPNY GVAEGEDDFIEEGIVMEDDSPVEAVSTPNTPRNLAAWKISIPY VDFEEDPSSERKEKKERI PVFCIDVERNDRRAVGHEPEHWSVYR RYLEFYVLESKLTEFHGAFFDAQLPSKRIIGPKNYEFLKSREE FQEYLQKLLQHPELSNSQLLADFLSPNGGETQFLDKILPDVNLG KIIKSVPGKLMKEKGQHLPEFIMNFINSCESPKPKPSRPELTIL SPTSENNKKLFNDLFKNANRAENTERKQONQYFMEVMTVEGVY DYLMYVGRVVFQVPDWLHLLMGTRILFKNTLEMYTDYYLOCKL EQLFQEHRLVSLITLLRDAIFCENTEPRSLQDKQKAGKQTFEEM MNYIPDLLVKCIGEETKYESIRLLFDGLQQPVLNKLTYVLLDI VIQELFPELNVKQKEVTSVTSWM |
| 6592 | 3 | 1861 | AEPLFGSTISSGSMIDANLKLQAEQRLKAIVAEKFAIATKEG DLFPQVERFFKIFPLGLHEEGLRKFSEYLCKQVASKAEENLLMV LGTDMSDRRAAVIFADTLTLLFEGIARIVETHQPIVETYYGPGR LYTLIKYLQVECDRQVEKVVDKFIKQRDYHQQFRHVQNNLMRNS TTEKIEPRELDPILEVTLMNARSELVRLFKKRISSEDFEVDGS MASEEVKQEHQKCLDKLLNNCLSLCTMQLIGLYVTMEEFYFMR TVNKAVALDTYKGLTSSMVDVFPYIVKKCIGRALSSSSIDCL CAMINLATTELESDFRDVLCNKLRMGFPATTFQDIQRGVTSAVN IMHSSLQQKGFDTKGIESTDEAKMSFLVTLANVVCSENI STLK KTLES DCTKLFSQIGGGEQAQAFDSCLSDLAAVSNKFRDLLQE GLTELNSTAIKPQVPWINSFFSVSHNIEEEEFNDYEANDPWVQ QFILNLEQQMAEFKASLSPVIYDSL TGLMTSLVAVELEKVVLS TFNRLGGLQFDKELRSLIAYLTVTWTITROKPARLSQMATILN LERVTEILDYWGPNSGPLTWRLTPAEVRQVLALRIDFRSEDTR LRL |
| 6593 | 3 | 1837 | EAFSAGSRRRGLALQRGVIGGLGGYCPCCRRRGRLLVLLLVLR RGEGGGGGRGRGDKRRRRQARRRRPEPAEARGGKMADVLSVL RQYNIQKKEIVVKGDEVIFGEFSWPKNVKINYVWVGTEKGGQPR |

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|------------|--|--|---|
| | | | EYVTLDSILFLNNVHLSHPVYVRRRAATENIPVVRPDRKDLIG YLNGEASTSASIDRSAPLEIGLQQRSTQVKRADEVLAELAKPRI EDEECVRLDKERLAARLEGHKEGIVQTEQIRSLSEAMSVEKIAA IKAKIMAKKRSTIKTDLDDITALKQRSFVDAEVDVTRDIVSRE RVWRTRTTILQSTGKNFSKNIFAILQSVKAREEGRAPEQRFAPN AAPVDPTLRTKQPIPAAYNRYDQERFKGKEETEGFKIDMTGYH GMTLKSVTGASARKTQTPAAQPVPRPVSRPFPNPKKGSRTTP IIIPAAATSLITMLNAKDLQDLKFVPSDEKKKQGCQRENEL IQRRKDMQPGGTALISVTVYRVVDQPLKMPQDWDVAVFVQ GPAWQFKGWPLLLPDGSPVDIFAKIKAFHLKYDEVRLDPNVQKW DVTVLELSYHKRHLDRPVFLRVWETLDRYVMVKHSHLRF |
| 6594 | 1 | 1096 | EFPPRRFRGSQASFLCATCGPALLRAPTRAAMTRSLFKGNFWSA DILSTIGYDNI IQHLNNGRKNCKEFEDFLKERAIEERYGKDLL NLSRKKPCGQSEINTLKRALEVFQKQVNDVAQCHIQLAQSREE ARKMBEFREKQKLQKKTLEIMDAIHKKQLQFKKTMDAKKNYE QKCRDKDEAEQAVSRANLVNPKQKEKLFVKLATSKTAVEDSK AYMLHIGTLDKVRWEWQSEHIKACEAFAEQECERINFFRNALWL HVNQLSQQCVTSDEMYEQVRKSLEMCISIQRDIEYFVNQRKTGQI PPAPIMYENFYSSQKNVAVPAGKATGPNLARRGPLPIPKSSPDDP NYSLVDDYSLLYQ |
| 6595 | 57 | 781 | PLGTMSDSDLGEDEGLLSLAGKRKRGNLPKESVKILRDWLYLH RYNAYPSEQEKLSSGQTNLSVLQICNWFINARRLLPDMLRKD GKDPNQFTISRGGKASDVAFRGSSPSVLAVSVAPATNVLSLS VCSMPLHSGQGEKPAAPFFRGELESFKPLVTPGSTLTLLTRAE GSPTGGLFNTPTPTPEQDKEDFSSFQLLVEVALQRAEMELQK QQDPSLPLHPTPLPLVSENPO |
| 6596 | 2 | 1026 | PRLPVRRYHGRRRLQGRSRGHMAEGDAGSDQRQNEETEAMAAY GEWCVIDDCAKIFCIRISDDIDDPKWTLCQVMLPNEYPGTAP PIYQLNAPWLKQGERADLSNLEEIYIQNIGESILYLWVEKIRD VLIQKSQMTPEGPDVKKKTEEDVECEDDLILACQPESSVKALD FDISETRTEVEVEELPPIDHGIPITDRRSTFOAHLAPVVCCKQV KMVLSKLYENKKIASATHNIYAYRIYCEDKQTFLODCEDDGETA AGGRLLHLMELNVKNVMVVSRYGGILLGPDRFKHINNARN ILVEKNYTNSPRESSKALGNKKVRKDKKRNEH |
| 6597 | 2 | 1026 | PRLPVRRYHGRRRLQGRSRGHMAEGDAGSDQRQNEETEAMAAY GEWCVIDDCAKIFCIRISDDIDDPKWTLCQVMLPNEYPGTAP PIYQLNAPWLKQGERADLSNLEEIYIQNIGESILYLWVEKIRD VLIQKSQMTPEGPDVKKKTEEDVECEDDLILACQPESSVKALD FDISETRTEVEVEELPPIDHGIPITDRRSTFOAHLAPVVCCKQV KMVLSKLYENKKIASATHNIYAYRIYCEDKQTFLODCEDDGETA AGGRLLHLMELNVKNVMVVSRYGGILLGPDRFKHINNARN ILVEKNYTNSPRESSKALGNKKVRKDKKRNEH |
| 6598 | 1099 | 419 | PRVRWATIMAMSFWEFQYRFPFFFTLQPNVDTRQQLAAWCSL VLSFCRLHKQSSMTVMEAQESPLFNNVKLQKRLPVESIQLVLEE LRKKNLEWLDKSKSSFLIMWRRPEEWGKLIYQWVSRSGONNSV FTLYELTNGEDTEDEEFHGLDEATLLRALQALQEHKASITVS DGPRRQVLLAGTCLPLLLTSHLSRAFKRRQTQCPPTKGSVTTPD SKGLQS |
| 6599 | 164 | 1593 | KMAALTTLFKYIDENQDRYIKKLAKWVAIQSVSAWPEKRGEIRR MMEVAAADVQKLGGSVELVDIGKQKLPDGSSEIPLPILLGRIGS DPQKKTVCYIYGLDVPAALEDGWDSEFPTLVERDGKLGHRGST DDKGPVAGWINALEAYQKTGQEI PVNVRFCEGMEESGSEGLDE LIFARKDTFFKDVYVCISDNYNLGKKKPCITYGLRGICYFFIE VBESNKLHSGVYGVHSEAMTDLILLMGSVLVDKRNILIPGIN EAVAAVTFEHKLVDIDFIEEFAKDVGAQILLHSHKIDILMH RWRYPSLSLHGIEGAFSGSGAKTVIPRKVVGKFSIRLVNMTPE |

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|------------|--|--|--|
| | | | VVGEQVTSYLTKKFAELRSPNEFKVYMGHGGKPPWVSDFSHPHYL AGRRAMKTVFGVEPDLTREGGSIPTVTLTFQEATGKNVMLLPVGS ADDGAHSQNEKLNRYNIEGTKMLAAYLYEVSQDKD |
| 6600 | 2 | 934 | PGRLFRVAAMESAGLEQLLRELLPDTERRIRRATEQLQIVLRAP AALSALCDLLASADPQIRQFAAVLTRRLNTRWRRLAAEQRES LKSLILTALQRETEHCVSLSLAQLSATIFRKEGLEAWPQLLQLL QHSTHSFHSFEREMGLLLSVVTSRPEAFQPHHRELLRLNET LGEVGSFGLLFYSRLTTLTMAPYLSTEDVPLARMLVPKLTMMQ TLIPIDEAKACEALEALDELLESEVPVITPYLSEVLTFCLEVAR NVALGNAIRIRILCCLTFLVKVKSALLKNRLLATLAHPFPHC GC |
| 6601 | 529 | 1420 | PRAAARAPPFAVLRRDRRAATAPGAGEMTLHGFLAQRVFLNHTIE KITTWQDPRKAMNQLNHNHLPVAVSSTPVPQRMAVSQPNLVM NHQHQQMAPSTLSQQNHPTQNEPAGLMSMPNALTQQQQQOOL RLQRIQMERERIRMRQBELMRQEAALCQRLPMEATLAPVQAAV NPTMTFDMRSITNNSSDFLNGGPPYHSREQSTDGSLGLGCYSV PTTPEDFLSNVDEMDTGENAGQTPMNIINPQTRFPDFDCLPGT NVDLGTLESEDLIPLFNDVESALNKSEPFITWL |
| 6602 | 127 | 617 | LLDFPALPKFVLQAQSPKAGKPTMTSMTQSLREVIKAMTKARNE ERVLGKITLVSAAPGKVICEMKVEEHTNAIGTLHGGLTATLVD NISTMALLCTERGAPGVSVDNMITYMSPAKLGEDIVITAHVLKQ GKTLAFTSVDLTNKATGKLIAGGRHTKHLGN |
| 6603 | 79 | 660 | PVGPSSLAARTGLGHLPLFLHRLASSRGLDMDLLQFLAPLFLVLL SGMGATGLRTSLDPSLEIYKKMFVKKREQLLALQNLALQNDI HQQYKILDVMLKGLFKVLEDSRTVLTAAADVLPDGPFPQDEKLD AFSHVVENTAFPGDVLRFPRIHVHYFDHNSNWNLLIRWGISFC NCTGVFNQGPSPILSLM |
| 6604 | 3 | 688 | TSTAQRQGGGRMSFRGGGRGGFNRRGGGGGFFNRGGSSNHFRGGG GGGGGGRFRGGGRGGFGRGGGRGGFNKGQDQGPPERVLLGEFL HPCEDDIVCKCTTDENKVPYFNAPVYLENKEQIGKVDEIFGQLR DFYFSVKLSENKASSFKLQKFYIDPYKLLPLQRFLEPPGEGK GPPRGGGRGGGRGGGRGGGRGGGRGGFRGGGGGGGFRGGGRG GGFRGRGH |
| 6605 | 7 | 848 | SGSRGAMRAAGVGLVDCHCHLSAPDFDRDLDDVLEKAKKANVV ALVAVAEHSGEFEKIMQLSERYNGFVLPCLGVHPVQGLPPEDQR SVTLKDLDDVALPIIENYKDRLLAIGEVGLDFSPRFAGTGBQKEE QRQVLIHQIQLAKRLNLPVNVHSRSAGRPTINLLQEQGAEKVLL HAFDGRPSVAMEGVRAGYFFSIPPSIIRSGQKLVKQLPLTSC LETDSPALGPKEQVRNEPWNISISABYIAQVKGISVEEVIEVTT QNALKLFPKLRHLLQK |
| 6606 | 2 | 1682 | FVEIRPRAEVANLSAHSASPIQDAVLKRLSLEDIVYRQNLGLS KSLGLIEGYGGRGKGLPATLSPAEEEEKAGFHEKYGYNSYLSE KISLDRSIPDYRPTCKELKYSKDLPPQISIIIFVNEALSIVLR SVHSAVNHTPTHLLKEIILVDDNSDEELKVPLEEYVHKRYPG VKVVRNQKREGLIRARIEGWKVATGQVTGFFDAHVEFTAGWAE VLSRIQENRKRVILPSIDNIKQDNFEVQRYENSAGHSWELWCM YISPPKDWWDAGDPSLPRTIPAMIGCSFVVRNKKFGEIGLLDPG MDVYGGENIELGIKWLCCGSMEVLPCSRVAHIBRKKKPYNSNI GPYTKRNALRVAEVMDDYKSHVYIAWNLPENPGIDIGDVSR RALRKSILCKNFQWYLDHVYPEMRRYNTVAYGELRNKAKDVC LDQGPLENHTAILYPCHGWGPQLARYTKEGFLHLGALGTTTLPL DTRCLVDNSKSRPLQLLDCDKVSSLYKRWNFIONGAIMNKGTC RCLEVENRGLAGIDLILRSCTQORWTIKNSIK |
| 6607 | 137 | 986 | VFACAGLKKEARSLASPPRLNLTKLQASCRALFSPPIQSRQTT GISFCGRGGAGPGVPTRTQVFAAMGAVMGTFSSLQTKQRRPSKD KIEDELEMTMVCHRPEGLEQLEAQTNFTKRELOVLYRGFKNECP |

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|------------|--|--|---|
| | | | SGVVDNEDTFKQIYAQFFPHGDASTYAHYLFNAFDTTQTGSKVFE DFVTALSI LLRGTVHEKLRWTFNLYDINKDGYINQEEMMDIVKA IYDMMGKYTTPVLKEDTPRQHVVDVFFQKMDKNKDGIVTLDEFLE SCQEDDNIMRSLQLFQNV |
| 6608 | 224 | 1140 | RPCFSSPTGLCERLSYPMILLQHAVLPPPKQSPSPSPMSVATRS TGTLQLPFPQKPFQGEASLPLAGEEELSKGGEQDCALEELCKPLY CKLCNVTLSAQQAQAHYQGNHGGKLRNYAANSCPPARMN VVEPAATFVVPVPPCMGSKFKPGGRVILATENDYCKLCDASFSSP AVAQAHYQGNHAKRLRLAEASNSFSSESELGQRRARKEGNEF KMMPNRRNMYTVQNNSGPYFNPRSRQRI PRDLAMCVTFSGQFYC SMCNVGAAGEEMEFQCHLESQKHKS KVSEQRVYRNEMENLGYV |
| 6609 | 1 | 443 | FLRRCRRFRVAGGRLAGLRESRVFAPEQRLSALTLLSWSAVT PAAEPGNFQLSPAEPGRGLASPVRAAPRACPAAEEMSELNKTTS PATNQAAGQEEKKGAGNVKKAEEEEIDIDLTA PETEKAALAIQ GKFRFPKRRKDDPS |
| 6610 | 319 | 881 | GRKSLCNLHIFIRFPLTYPDMYMGMMCTAKKCGIRFQPPAILI YESEIKGKIRQIMPVRNFSKFSDCTRAABQLKNNPRHKSYLEQ VSLRQLEKLFSLRGYLSGQSLAETMEQIQRETTIDPEEDLNKL DDKELAKRKSIMDELFEKNQKKKDDPNFVVDIEVEFPQDDQLQS CGWDTESADEP |
| 6611 | 978 | 212 | PGCSGAGSRVWVLPALRHLAGSTESSEGRVVSFGVDEEERVRV LQGVRLSENVNRMKEFPSPPPAPTSSTFGLQDGNLRAPHKEST LPRSGSSGQQPSGMKEGVKRYEQRHAAIQDKLFQVAKREREA TKHKSASLPTGEGSISHEEQKSVRLARELESREAE LRDRDYK EQLERIERKNAEMYKLSSEQFHEAASKMESTIKPRRVEPVCSGL QAQLLHCYDRDRPHEVLLCSLDLVKAYQRCVSAAHKG |
| 6612 | 1724 | 992 | VSTHASALSRTQGPQORPRAAASGAGAGTAGGGGSGGAEGSKM STEAQRVDDSPSTSGSSSDGDQRESVQEPEREQVQPKKKEGKI SSKTAALKSTSAKRIQKELAEITLDPNCSAGPKGDNIEWRS TILGPPGSVYEGGVFLDITFSPDYPPKPKVTFRTRIYHCNIN SGQVICLDILKDNWSPALTISKVLLSICSLTDCNPADPLVGS ATQYMTNRAEHDMMARQWTKRYAT |
| 6613 | 130 | 748 | ELELSSNMPEQSNDRVAVFGAGGVGKSSLVLRVFKGTFRFSYI PTVEDTYRQVISCDKSICTLQITDTTGS HQFPAMQRLSISKGHA FILVYSITSRQSLBELKPIYEQICEIKGDVSIPIMLVGNKDE SPSREVQSSEARALARTWKCAFMTSAKLNHNVKELFQELLNLE KRRTVSLQIDGKSKQOKRKEKLKGCVM |
| 6614 | 3 | 1191 | SSAAEAMRVLRRCWGPPLAHGARRGRPSQWRALRLGWEDCR DSRVREKPPWRVLPFGTDQFAREALRALHAARENKEEELIDKLE VVTMPSPSPKGLPVKQYAVQSQLPVYEWPDVGSGEYDVGVVASF GRLLNEALILKFPYGLNVHPSCLPRWRGPAPVIHTVLHGDTVT GVTIMQIRPKRFDVGPILKQETVPVPPKSTAKELBAVLSRLGAN MLISVLKNLPESLSNGRQQPMEGATYAPKISAGTSCIKWEEQTS EQIFRLYRAIGNIIPQLTLWMANTIKLLDLVEVNSSVLADPKLT GQALIPGSVIYHKQSQILLVYCKDGWIGVRSVMLKKSILTATDFY NGYLHPWYQKNSQAQPSQCRFQTLRLPTKKKQKKTVMQCCIE |
| 6615 | 832 | 35 | GRVGAGASAMSELPDGVRAFLREHPSLRLOT DARKVRCILTGHE LPCRLPELOVYTRGKKYQRLVRASPAFDYAEFEPHIVPSTKNPH QLFCKLTLRHINKCPEHVL RHTQGRRYQALCKYEECQKQVEY VPACL VHRRRRRDQMDGDGPRPRAFWPTSSDEGGAASDDSM TDLYPPELFTRKDLGSTEDGDGTD DFLTDKEDEKAKPPREKATD EGRRETTVYRGLVQKRGKKQLGSLKKKFKSHRKP KPSFSSCKQS G |
| 6616 | 347 | 1886 | LLPPCQGARPLSSPPHASEDNLF LFWNCILCAFFHPSPQPLQYP VWPLLVI TQIPAPRHLRNRPFSFSGGLDSFGSLSTPSICRS |

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|------------|--|--|---|
| | | | PAWVKMAPWPPKGLVPAVLWGLSLFLNLPGPFIWLQPSPPQSSP PPQPHPCHTCRGLVDSFNKGLERTIRDNFGGGNTAWEEENLSKY KDSETRLVEVLEGVCSKSDFECHRLLELSEELVESWFWHKQGEA PDLFQWLCSDSLKCCPAGTFGPSCLPFGGTERPCGGYGQCEG EGTRGGSGHCDQCAGYGGACGQCGLGYFEARNASHLVCSACF GPCARCSGPEESNCLQCKKGWALHHLKCDVIDECGTBEGANGCAD QFCVNTGSGYECRDCAKACLGCMGAGPGRCKKCSFGYQGVGSKC LDVDECETEVCPEGNKQCENTEGGYRCICAEGYKMEGICVKEQ IPESAGFFSEMTEDELVVLLQQMFFGIIICALATLAAKGDVFTA IFGAVAAMTGYWLSERSDRVLEGFKGR |
| 6617 | 118 | 673 | VWMAWQVSLLELEDRLOCPICLEVFKESLMLQCGHSYCKGCLVS LSYHLDTKVRCPCMCQAVDGSLLPNVSLAWVIEALRLPGDPEP KCVVHRNPLSLFCEKDQELICGLGSLGSHQHHPVTPISTVCS RMKEELAAALFSELKQEQKKVDELIAKLVNTRIDGSAPSLCPC LGPATFTFL |
| 6618 | 548 | 136 | DGKVARAPNSPAFQNDIYPLVSAPRATTAEPSWVKVLTQCR NVPKMTSERSRIPCLSAAAEAGTGKKQEGRAMATLDRKVPSP APLGKWPSSWIDAALHCSNDVLEEGKEGKSRVEMRLNKEA WKVGT |
| 6619 | 246 | 842 | PASSEVLTAAMVFLLLNCIVAVSQNMGIGKNGDLPRPPLRNEFR YFQRMTTSSVEGKQNLVIMGRKTWFSIPEKNRPLKDRINLVLS RELKEPPQGAHFLARSLDDALKTERPELANKVDMIWIVGSSV YKEMNHLGHLKLFVTRIMQDFESDTFFSEIDLEKYKLLPEYPG ILSDVQEGKHICYKEFEVCEKDD |
| 6620 | 3 | 1879 | NSRVDDFVARARMAAENEASQESALGAYSPVDYMTSTSPFRLPE DEPAPAAPLRGRKDEDAFLGDDPTDPPDSFLKSARLQRLPSSSS MGSQDGSPLRETRKDPFSAAAECSCRODGLTVITACLTFTATG VTVALVMQIYFGDPQIFQQGAVVTDAACTSLGIEVLSKQSSV DAVAAALCLGIVAPHSSGLGGGVMLVHDIRRNESHLDIFRES APGALREETLQRSWETKPGLLVGVPMVKGLHEAHQLYGRLPWS QVLAFAAAVAQDGFNVTHDLARALAEQLPPNMSERFRETFPLSG RPPLPGSLLRPDLAELVDVLGTSGPAAFYAGGNLTLEMVAEAG HAGGVITEEDFSNYSALVEKPVCGVYRGHLVLSPPPPHTGPALI SALNILEGFNLTSLSVSEQALHWAETLKIALLASRLGDPVYD STITESMDDMLSKEVAAAYLRGHINDSQAAPAPLLEFVYELDGAPT AAQVLIMGPDDFIVAMVSSLNQPFSGGLITPFGILLNSQMLDFS WPNRTANHSAPSLNSVQPGKRPLSFLLPVVRPAEGLCGTYLA LGANGAARGLSGLTQVRFTPWLAFFSREPSGCLDCRCLSYLWL SIPHAANMG |
| 6621 | 1 | 662 | VQGITSYQQLQALRKEKSRDAARSRRGKNEFFEYELAKLLPLP AAITSQDKASIIRLTISYLMKRDFAHQDPPWNLRMEGPPNT SVKVIQAQRRRSPSALAEVFEHLGSHLQSLDGYVFALNQEG KFLYISETVSIYGLSLQVELTGSSVFDYVHPGDHVEAEQLGMK LPPGRGLLSQGTAEAGASSASSSSQSETPPVVCFPPASDQFLL |
| 6622 | 2 | 319 | GRASGAQETEAGGPERARAMEANMPKRKEPGRSLRIKVISMG AEVGKSCIIRYCEKRFVSKYLATIGIDYGVTKVHVRDREIKVN IFDMAGHPFFYEVKPF |
| 6623 | 1886 | 189 | KALFEKVKKFRHLHVEEGDILYAMYVRQTVLKVIFLIIAYNSA LVSKVQFTVDCNVDIQDMTGYNFSCNHTMAHLFSKLSFCYLCF VSIYGLTCLYTLWLFYRSLREYSFEYVRQETGDDIPDVKNDF AFMLHMIDQYDPLYSKRFVFLSEVSENKQLQNLNNEWTPDKL RQKLQTNHNRLELPLIMLSGLPDTVFEITELQSLKLEIKVM IPATIAQLDNLQELSLHQCSVKIHSAAALSFLKENLKVLSVKPDD MRELPPWMYGLRNLLELYLVGSLSHDISRNVTLSESLDLKSLKI LSIKSNVSKIPOAVVDVSSHLOKMCIHNDGTKLVMNLNKKMTN LTELELVHCDLERIPHAVFSLSLQELDLKENNLKSIEEIVSFQ |

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|------------|--|--|---|
| | | | HLRKLTVLKLWHSNITYIPEHTKKLTSLERLSFSHNKIEVLPSH LFLCNKIRYLDLSYNDIRFIPPEIGVLQSLQYFSITCNKVESLP DELYFCKKLTLLKIGKNSLSVLSPKIGNLLFLSYLDGKGNHFEI LPPELGDCRALKRAGLVVEDALFETLPSPDVREQMKT |
| 6624 | 218 | 1786 | GSRGGGSRIPAVSTHVAPGRSVLRFPFASGALRLSLVKALGGC RGRPSGLAHLSEQETSHWRKRSGRACLDGFPGEILRSFIMKCTA REWLRTTVLFMARAIAMVVPNATLLEKLEKYMDEDEGWIA KQGRKRAITDNDMQSILDLHNKLSQVYPTASNMEYMTWDVELE RSAESWAESCLWEHGPAFLSISGQNLGAHWGRYRPPFPVQSW YDEVKDFSPYEHCECNFYCPFRCSGPVCTHYTQVWATSNRIGC AINLCHNMNIWQIWPKAVYLVNYSKGNWGHAPYKHGRPCS ACPPSFGGCGRENLCYKEGSDRYPPREETNEIERQQSQVHDT HVRTSDSSRNEVISAOQMSQIVSCEVRLRDQCKGTTNRYEC PAGCLDSKAKVIGSVHYEMQSSICRAAIHYGIIDNDGGWVDITR QGRKHYFIKSNRNGIQTTIGKYQSANSFTVSKVTQAVTCTTVE QLCPFHKPAHCPRVYCPKLYASKSTLCSCNWNSSLF |
| 6625 | 1124 | 543 | PGPRGGGSLSTKALGRSRLGMLHGPSSGGTEGGVPTALRPP GPLVPTSDNDNLKNIELFDKLALRFHGRLLFLKDVLDGDEICCW SFYGGQRKIAEVCCTSIYVATEKKQTKVEFPPEARIFEETNLILI YETPRGPDALLEATGGAAGAGGAGRGEDENREHVRRIHVRR HITHDERPHGQQIVFKD |
| 6626 | 3 | 1498 | SAVEFVYTDRLFHLILGISVEFLCSLRSDATMESITACLHALQAL LDVWPWRSKIGSDQDSGIELNLVLRHVILTRESPSIQLASLEV RQIIICAAQEHVKEKRRSAEVDGAAEKETLPEFGGKDTGGLVP GKSLVFATLELCVCILVRQLPELNPKITGSPGVKATKPQILLE GSRVSAALVILSELPAVCSPEGSISILPTILYLTIGVLRITAV KLPGGQLSSTVAASLQALKGILSSPMARAEKSRATWTDLLRSAL TTILDCWDPVDETHQELDEVSLTALTITFILSTSPVTTIPCLQ KRCIDKFKATLEIKDPVQIKTYQLLHSIPQYPNPAVSPYPIYS LASCIMEKLOEIDKRKPENTAELEIFQEGIKVLETLVTVAEEHH RAQLVACLLPILISFLDENSLSGATSIMRNLHDFALQNLMOIG PQYSSVFKSLVASSPALKARLEAAIKGNQESVKVKIPTS KYTKS PGKNSSIQLKTSFL |
| 6627 | 1 | 697 | GIPHLSSRDMTGTFGAVATRDGEAPERSFPSPSYDLTGKVMLL GDTGVGKTCFLIQFKDGAFLSGTFIATVGIDFRNKVTVVDGVRV KLQIWDTAGQERFRSVTHAYYRDAQALLLYDITNKSSFDNIRA WLTEIHEYAQRDVVIMLLGNKADMSERVIRSEDGETLAREYGV PFLTSAGTGMNVLAFLAIAKELKYRAGHQADEPSFQIRDYVE SQKRRSSCCSFM |
| 6628 | 1 | 1861 | QCAEFGGGGGGGGGGGGGGGGGGAGGEEENKENERPSAGSKAN KEFGDSLSEILQIIKESQQQHGLRHGDFQRYRGYCSRRQRRLR KTLNFKMGNRHKFTGKKVTEELLTDNRYLLLVMDAERAWSYAM QLKQEAANTEPRKRPHLLSRLKAVKHAEELERLCESNRVDAKTK LEAQAYTAYLSGMLRFEHQEWKAAIEAFNKCKTIYEKLASAFTE EQAVLYNQVRVEEISPNIRYCAYNIGDQSAINELMQMRLRSGGTE GLLAELKLEALITQTRAKAATMSEVEWRGRTVPVKIDKVIIFLL GLADNEAAIVQAESEETKERLFESMLSECRDAIQVVRRELKPDQ KORDYILEGEPGKVSNLQYLHSYLYIKLSTAIKRNNEMAKGLQ RALLQQQPEDDSKRSRPPQDLIRLYDIIILQNLVELLQPLGLEED KAPQKEIGLKTLLVFKAYRCFFIAQSYVLVKKWSEALVLYDRVLK YANBVNSDAGAFKNSLKDLPDQVELITQVRSEKCSLQAAAILDA NDAHQETETSSSQVKDNKPLVERFETFCLEPSLVTKQANLVHFPF GFQPIPCPKPLPFDLALNHVAFPPLEDKLEQKTKSGLTGYIKGIF GFRS |
| 6629 | 5653 | 4549 | GATPLGSGVGGRTGKMDAATLYDTLRFAPFEDFPETSEPVWILG RKYSIFTEKDEILSDVASRLWFTYRKNFPAIGGTGPTSDTGWGC |

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|------------|--|--|--|
| | | | MLRCGQMIFAQALVCRHLGRDWRWTQKRPQDSYFSLNFAFIDR KDSYYSIHQIAQMGVGEKSGIGQWYGPNTVAQVLKKLAVFDTWS SLAVHIAMDNTVVMEEIRRLCRTSVPCAGATAFPADSDRHCNGF PAGAEVTNRPSRPLVLLIPLRLGLTDINEAYVETLKHCFMMP QSLGVIGGKPNASAHYFIGYVGEELIYLDPHPTTQPAVEPTDGCFI PDESFCQHPPCRMSIAELDPSIAVVRGGHLSQAFGAECCLGM TRKTFGFLRFFFSMLG |
| 6630 | 2 | 423 | LVQCGGIRRRSAWGAAMPGRHVSRRVRLYKRVLLQHLRVLPDDLKS LGDQYVKDEFRRHKTGVSDEAQRFLQEWVYATALLQANENRQ NSTGKACFGTFLPEEKLNDFRDEQIGQLQELMQEATKPNRQFSI SBSMKPKF |
| 6631 | 2 | 423 | LVQCGGIRRRSAWGAAMPGRHVSRRVRLYKRVLLQHLRVLPDDLKS LGDQYVKDEFRRHKTGVSDEAQRFLQEWVYATALLQANENRQ NSTGKACFGTFLPEEKLNDFRDEQIGQLQELMQEATKPNRQFSI SBSMKPKF |
| 6632 | 1273 | 558 | WNSRGRTQRGAAFLAPAAAMKAVVQVRTRASVTVGGEQISAIGR GICVLLGISLEDTQKLEHMRKILNLRVFEDESGKHWKSKVMD KQYEILCVSQFTLQCVLKGKPKDFHAMPTEQAEGFYNSFLEQL RKYRPELIKDGKFGAYMQVHIQNDGPVTIELESAPGATATSDP KQLSKLEKQQQRKEKTRAKGPSSESKERNTPRKEDRSASSGAEG DVSSEREP |
| 6633 | 1145 | 617 | ATGRHEGVPTLEGIIQQLVNGIITPATIPSLGPWGLHNSNPMY AWGANGLDAIITQLLNQFENTGPPPADKEKIQALPTVPVTEHV GSGLECPVCKDDYALGERVRLPCNHLPHDGCIVPWLEQHDSCP VCRKSLTGQNTATNPPGLTGVSFSSSSSSSSSSSPSNENATNS |
| 6634 | 1 | 1134 | CGGTPRKGGSPRRRLPMARLDCFLRLMLTLRSLFWSLVVCYC GLCASIHLLKLLWSLKGKPAQTFRPAREHPPACLSDPGLGTHC YVRIKDSGLRFHYVAAGERGKPLMLLLHGFPEFYWSRYQLREF KSEYRVVALDLRGYGETDAPHRQNYKLDCLITDKIDLSLGY SKCVLIGHDWGGMIAWLIACYPEMVMKLVINFPHPNVFTEYI IRHPAQLLKSSYYYFPQIPWFPEMFISINDFKVLKHLFTSHSTG IGRKGCQLTTEDLEAYIYVFSQPGALSGPINHYRNIFSCPLKH HMTTPTLLWGENDAFMEVEMAETVTRFYVKNYFRLLTILSEASH WLQDQDPDIVNKLITWFLKEETRKDD |
| 6635 | 1420 | 470 | EMRAGQQLASMLRWTRAWRLPREGLGPHGPSFARVPVAFSSSSG GRGGAEPRLPLSYRLLDGEAALPAVVFHGLFGSKTNFNSIAK ILAQQTGRRLTVTDARNHGDSPHSPDMSYEIMSQDLQDLPLQGL LVPCVVVGHSMGGKTAMLLALQRPPELVERLIAVDISPVESTGVS HFATYVAAAMRAINIADELPRSRARKLADEQLSSVIQDMAVRQHL LTNLVEVDGRFVVRVNLDAITQHLDKILAFPPQROESYLGPFLFL LGGNSQFVHPSSHPEIMRLFPRMQMTVPNAGHWIHADRPQDFI AAIRGFLV |
| 6636 | 1514 | 1801 | SFCMFSHKODSHFQAVPVQEKKKRLRRAPWRAFAQORLKHFAE QPIVRQCLQRPPLCGVLGPVQQLPPSLGVLSPHSDPGWCRVD DGGDGVF |
| 6637 | 2 | 1501 | CSSSPCFHDGTCVLDKAGSYKACLAGYTGQRCENLLEAGKSKI KASEDSLSVLEERNCSDPGGPVNGYQKITGGPGLINGRIHAKIGT VVSFFCMNSYVLSGNEKRTCCQNGEWSGKQFICIKACREPKISD LVRRRVLPMPQVSRETPLHQLYSAAFSKQKLQSAPTKKPALPFG DLPNGYQHLHTQLQYECISPFYRLGSSRRTCLRTGKWSGRAPS CIPICGKIENITAPKTQGLRWPAQAIYRRTSGVHDGSLHKGAN FLVCSGALVNERTVVAAHCVTDLGKVTMIKTADLKVVLGKFYR DDDRDEKTIQSLQISAILHPNYDPIILLADIAILLKLDKARIS TRVQFICLAASRLDSTSFSQESHITVAGWNVLADVRSPPGKNDTL RSGVSVVDSLLCEQEHEDHGI PVSVTDNMFCASWEPTAPSDIC TAETGGIAAVSFPGRASPEPRWHLMLVSWSYDKTCSHRLSTAF |

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|------------|--|--|--|
| 6638 | 1391 | 224 | TKVLPFKDWIERNMK GGIPQAGGKMAAPWRAALCECRRWRGFSTSAVLGRRTPLGPM PNSDIDLSNLERLEKYRSFDRYRRRAEQEAQAPHWRTYREYFG EKTDPKKEKIDIGLPPPKVSRQTQQLLERKQAIQELRANVEERAA RLRTASVPLDAVRAEWERTCGFYHKQRLAEYYGLYRDLFHGATF VPRVPLHVAYAVGEDDLMPVYCGNEVTPTEAAQAEVITYEABEG SLWTLTLLTSLDGHLLPEDAEYLHWLLTNIPGNRVAEGQVTCPYL PPFPARGSGIHRALFLLFKQDQPIDFSEDARSPCYOLAORTFR TFDFYKKHQETMTFAGLSFFQCRWDDSVTYIFHQLLDMREPVE FVRPPPYHFKQKRFPHRQPLRYLDYRDSHEPTYGYI |
| 6639 | 2046 | 1268 | IGCFIMDGGDDGNLIIKKRFVSEAELEDERRRRQEEWEKVRKPE DPBECPEEYVDPRSLYERLQEQKDRKQEQYEEQFKFKNMVRGLD DEETNFLDEVSRQQLIEKQRREBELKELKEYRNLLKKVGISQE NKKEVEKKLTVKPIETKNKFSQAKLLAGAVKHKSSSESGNSVKRL KPDPEPDDKNQEPSSCKSLGNTSLSGPSIHCPSAAVCIGILPGL GAYSGSSDSESSDSEGTINATGKIVSSIFRTNTFLEAP |
| 6640 | 117 | 1043 | VLEPPDVSMASEEDRSRLRIVLVGKTSGKRSATANTILGEEIFDS RIAAQAVTKNCQKASREWQGRDLLVVDTPGLFDTKESLDTTCKE ISRCIISSCPGPHAIIVLVLLGRYTEEBEQTVLAKAVFGKSAM KHMVILFTRKEELEGQSFDHFIADADVGLKSIKCEGNCRCASF NSKKTSAEKESQVQELVELIEKMQVCNEGAYFSDDIYKDTESR LKQREEVLRKIYTDQLNELIKLVEEDKHKSEKKEKEIKLLKLK YDEKIKNIREEAERNIFKDVFNRIWKMLSEIWHFRFLSKCKFYSS |
| 6641 | 1 | 894 | SAAVGRSEVRGCAPRFLRRSARRMDPVPGTDSAPLAGLAWSS ASAPPPRGFSAISCTVEGAPASFGKSAQKSGYFLCLSSLSGLE NPQENVVADIQIVVDKSPPLGFSFVCDPMDSKASVKKRMCV KLLPLGATDTAVFDVRLSGTKTVPGYLRIGDMGGFAIWCKKAK APRPVPKPRGLSRMQGLSLDAASQPSKGGLLERTASRLGSRAS TLRRNDSIYEASSLYGISAMDGVPFTLHPRFEGKSCSPLAFSAF GDLTIKSLADIEEYNYGVVEKTAARLPSPVS |
| 6642 | 22 | 1296 | PLEERMMTKMDPNDQQRDIIFELRRIAFDAESDPSNAPGSGTE KRKAMYTKDYKMLGFTNHNINPAMDFQTTPPGMLALDNMLYLAKV HQDTYIRIVLENSSREDKHECPFGRSAIELTKMLCEILQVGELP NEGRNDYHPMFTHDRAFEELFGICIQLLNKTWKEMRATAEDFN KVMQVREQITRALPSKPNSLDQFKSKLRSLSYSEILRLRQSER MSQDDFQSPPIVELREKIQPEILELIKQRLNRLCEGSSFRKIG NRRRQERFWYCRALNKHVLHYGDLDDNPQGEVTFESLQEKIPV ADIKAVTGKDCPHMKEKSALKQNKVELELAFSILYDPDETINF IAPNKVEYCIWIDGLSALLGKMSSELTKSDLDTLTSMEMKLRL LDLENIQIPEAPPPPIKPESSSYDFVYHYG |
| 6643 | 3049 | 2265 | SLHAPAEGRTRGRLEAKPKMLTRKIKLWDINAHITCRLCSGYLI DATTVTCLHTFCRSCLVKYLEENNTCPTCRIVIHQSHPLQYIG HDRTMQDIIYKLVPLGQEAEMRKQREFYHKLGMVPGDIKGETC SAKQHLDSHRNGETKADDSNKEAAEEKPEEDNDYHRSDEQVSI CLECNSKLRGLKRWIRCSAQATVHLKFKFIKKLNLSSFNEL DILCNEEILGKDHCLKFVVVTRWRFKKAPLLHYRPMKMDLL |
| 6644 | 1489 | 290 | FRPLATEPRGSSPVQLVSTMSVRTLPFLFLNLGGEMLYILDQR LRAQNI PGDKARKVLNDIISTMFNRKFMEELFKPQELYSKKALR TVYERLAHASIMKLNQASMDKLYDLMTMAFKYQVLLCPRPKDV LVTFNHLDTIKGFIRDSPTILQQVDETLRQLTEIYGGLSAGEFQ LIRQTLIIFFQDLHIRVSMFLKDKVQNNNGRFVLPVSGPVPGWT EVPGLIRMFNNKGEVVKRIEFKHGGNYVPAPKEGSFEFYGDRVL KLGTNMYSVNQPVETHVSGSSKNLASWTQESIAPNPLAKEELNF LARLMGGMEIKKPSGPEPGFRLNFTTDEEEEAALTRPEELSV EVINIQTQDQQRSEELARIMGEFEITEQPRLSTSKGDDLLAMM DEL |

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|------------|--|--|--|
| 6645 | 6530 | 4646 | FVEGLAGYVYKAASEGKVLTLAALLNRSSEDIRYLLGYVSQQG GQRSTPLIIAARNGHAKVVRLLLEHYRVQTQQTGTVRFDGYVID GATALWCAAGAGHFEVVKLLVSHGANVNHTTVNSTPLRAACFD GRLDIVKYLVENNANISIANKYDNTCLMIAAYKGHTDVVRYLLE QRADPNKAHCGATALHFAAEAGHIDIVKELIKWRAAIVVNGHG MTPLKVAESCKADVVELLSHADCDRRSRIEALLEGASFAND RENYDIIKTYHYLYLAMLERFQDGDNILEKEVLPPHAYGNRTE CRNPQSELESIRQDRDALHMEGLIVRERILGADNIDVSHPIIYRG AVYADNMEFEQCICKLWHLHLRQKGNRNTHKDLRFAQVFSQM IHLNETVKAPDIECVLRCSVLEIEQSMNRVKNISDADVHNAMDN YECNLYTFLYLVCISTKTQCSEEDQCKINKQIYNLIHLDPRTRE GPTLLHLAVNSNTPVDDFHTNDVCSFPNALVTKLLLDGCAEVNA VDNEGNSALHIIIVQYNRPIISDFLTLSIIISLVEAGHTDMTNK QNKTPLDKSTGTGVSEILLKTQMKMSLKCLAAARAVRANDINYDQD IPRTLEEFVGFSH |
| 6646 | 176 | 890 | PSSRMNHLPEDMENALTGSQSSHASLRNIHSINPTQLMARIESY EGREKKGISDVRRTFCLFVTFDLLFVTLWIIELNVNGGIENL EKEVMQYDYSSYFDIFLLAVFRFKVLILAYAVCRLRHWWAIAL TTAVTSAFLAKVILSKLFSQGAFGYVLPPIISFILAWIETWFLD FKVLPQEAEEENRLIVQDASERAALIPGGLSDGQFYSPPESEA GSEEAEEKQDSEKPLEL |
| 6647 | 176 | 890 | PSSRMNHLPEDMENALTGSQSSHASLRNIHSINPTQLMARIESY EGREKKGISDVRRTFCLFVTFDLLFVTLWIIELNVNGGIENL EKEVMQYDYSSYFDIFLLAVFRFKVLILAYAVCRLRHWWAIAL TTAVTSAFLAKVILSKLFSQGAFGYVLPPIISFILAWIETWFLD FKVLPQEAEEENRLIVQDASERAALIPGGLSDGQFYSPPESEA GSEEAEEKQDSEKPLEL |
| 6648 | 413 | 897 | RNCWNCFTKYFNSPPEDIDHKDSYLI TRSIMEAPDYIEDDNPEL IRPQKLINPVKTSRNHQLHRELLMNQKRGAPQNKPELQKVME KRRRDQVIKQKEEAQKKSDLEIELLKROQKLEQLEKQKLO EEQENAPEFVKVKNLRRRTQGEVAQAQES |
| 6649 | 1357 | 832 | WIPRAAGIRHEVVKWDVKEIMSOHNIYVDALLKEFEQFNRLNEV SKRVRIPLVSNILWEHCIRLANRTIVEGYANVKKCSNEGRAIM QLDFQOFLMKLEKLTDIRPIPDKEFVETIYKAYLTENDMERWI KEHREYSTKQLTNLVNVCGLSHINKKARQKLLAIDDDIRPKR |
| 6650 | 32 | 765 | LVPLVFSLLVQSCQVYRSIAMKFPVPCLLLVTLSCGLTIGQAPR QKQGSTGEEFHFQTGGRDSC TMRPSSLGQGAGEVWLRVDCRNTD QTYWCEYRGQPSMCOAFAADPKSYWNQALQELRRLHHACQGAPV LRPSVCREAGPOAHMQQVTSLSKGSPEPNQPEAGTPSLRPKAT VKLTEATQLGKDSMBELGKAKPTTRPTAKPTQPGPRPGGNEEAK KKAWEHCWKPFQALCAFLISFFRG |
| 6651 | 3425 | 1353 | AKELLKVGDVSLCAGPYQNTADTMENLSKEPLASFVSESFDISA CGIATEHVKIDNSGEGLTAEAGSETLSRDGEVGVNSDMHYELSG DSDLDLLGDCRNPRLDLEDSTYLRGSYTRKKDVPTDGYESSLNF HNNNQEDWGCSSWVPGMETSLPPGHWTAAVKKEKCVPPYVQIR DLHGILRTYANFSITKELKDTMRTSHGLRRHPSFSANCGLPSSW TSTWQVADDLTQNTLDLEYLRFAHKLKQTIKNGDSQHSASSANV FPKESPTQISIGAFPSTKISEAPFLHPAPRSRSPLLVTVVEDSP RPQGPQPRGYTASSLDSSSSWRERCSHNRDLRNSQRNHTVSFHL NKLKYNSTVKESRNDISLILNEYAEFNKVMKNSNQIFQDKELN DVSGEATAQEMYLPPGRSASYEDIIIDVCTNLHVKLRSVVKEA CKSTFLFYLVETEDKSFVVRTKNLLRKGHTEIEPQHFCQAFHR ENDTLIIIRNEDISSHLHQIPSLKLKHPFSVIFAGVDSPGDV LDHTYQELFRAGGFVISDDKILEAVTLVQLKEIIKILEKLNNG RWKWLHLYRENKKLKEDEVDSTAHKKNIMLKSFSQSANIIELHL YHQCDSSRSSTKAEILKCLLNLOIQHIDARFAVLLTDKPTIPREV |

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|------------|--|--|---|
| 6652 | 2 | 1343 | FENNGILVTDVNNFIENIEKIAAPFRSSYW IPGSTISCSCHSRRLRGGSAPRLSLGAASPRPRPPSLPLPLPL PPFLFLPTRPAERAWIRRRASEWVGKMEVPRLDHALNSPTSPC EEVIKNLSLEAIQLCDRDGNKSQDSGIAEMEELPVPHNIKISNI TCDSEFKISWEMDSKSKDRITHYFIDLNKKENKNSNKFHKHDVPT KLVAKAVFLPMTVRGHWFLSPRTEYTVAVQTASKQVDGDYVNSE WSEIIEFCTADYSKVHLTQLLEKAEVIAGRMLKFSVFYRNQHKKE YFDYVREHGNAMQPSVKDNSGSHGSPISGKLEGIFFSCSTEFN TGKPPQDSPYGRYRFEIAAEKLFNPNNTLYFGDFYCMYTAYHYV ILVILAPVGS PGDEFCKQRLPQLNSKDNKPLTCTEEDGVLVYHHA QDVILEVIYTDVVDLSLGTVAEITGHQLMSLSTANAKKDPSCKT CNISVGR |
| 6653 | 170 | 1910 | FFLEPRLRFPFASRARFVPARTRPSPLHPCCFEGGGSMLSPQ RVAAAASRGADDAMESSKPGPVQVVLVQKDQHSFELDEKALASI LQDHIRDLDVVVSVAGAFKKGKSFILDFMLRYLYSQKESGHS NWLGDPEEPPLTGFSWRGSDPETTGIIQWSEVFTVEKPGGKKA VVLMDTQCAFDSQSTVKDCATIFALSTMTSSVQIYNLSQNTQED DLQQLQLFTEYGRLAMDEIFQKPFQTLMLVLDWSFPPEYSYGL QGGMAFLDKRLQVKEHQHEEIQNVNRNHIHSCFSDVTCFLPHFG LQVATSPDFGKLDIAGEFKEQLQALIPYVLNPSKLMKEKEING SKVTCRGLLEYFKAYIKIYQGEDLPHPKSMLQATAEAYNLAAAA SAKDIYNNMEVCGGKPYLSPDILEEKHCEFKQLALDHFKKKT KMGKGDPSFRYQQBLEEEIKELYENFCKHNGSKNVFSTFRTPA VLFTGIVALYIASGLTGFIGLEVVAAQLFNCMVGLLLIALLTNGY IRYSGQYRELGGALDFGAAYVLBQASSHIGNSTQATVRDAVVGR PSMDKKAQ |
| 6654 | 1 | 705 | RTSLSPSQCSSFNLAMASAGMQLGVVLTLLGWVNGLVSCALPM WKVTAFIGNSIVVAQVWVWGLWMSCVVQSTGQMCKVYDLSLAL PDLQAARALCVIALLVALLFGLLVYLAGAKCTCVEEKDSKARL VLTSGIVFVISGVLTLIPVCWTAHAVIRDFYNPLVAEAQKRELG ASLYLGWAASGLLLGGGLLCTCPSGGSGQPSHYMARYSTSAP AISRGPSSEYPTKNYV |
| 6655 | 341 | 16 | KDAYMPKKGLLALALVPSLPVFAAEHWIDVRVPEQYQOEHVQGA INIPLEKVKERIATAVPDKNDITVKVYCNAGRQSGQAKEILLSEM YTHVENAGGLKDIAMPKVKG |
| 6656 | 2 | 1212 | TELPFRPANLAIQFPLSPLRALAPLEKPGAVPPQKRMMAKVAK DLNPGVKKMSLGLQSQARGVACLGCKGTCSGFEPHSWRKICKSC KCSQEDHCLTSDLEDDRKIGRLMDSKYSTLTARVKGGDGIRIY KRNRMIMTNPIATGKDPFTDTITYEWAPPVGTQKLGLQYMEIIP KEKQPVGTGEGAFYRRRQLMHQLPIYDQDPSRCRGLLENELKLM EEFVKQYKSEALGVGEVALPGQGGLPKEEGKQEKPEGAETAA TTNGSLSDPSKEVEYVCELCKGAPPDPSVVYSDRAGYNKQWHP TCFVCAKCEPLVDLIYFWKDGAPWCGRHYCESLRPRCSGCDIE IFAEDYQRVEDLAWHRKHVFCGCEQLLSGRAYIVTKGQLLCPT CSKSKRS |
| 6657 | 830 | 2120 | LLTCQERAGDCLLSASTMKEVVYWSPPKKVADWLLLENAMPEYCEP LEHFTGQDLINLTQEDFKKPLCRVSSDNGQRLLDMIETLKMEH HLEAHKNHGHANGHLNIGVDIPTDGSFPIKIPNGMPNGYRKEM IKIPMEPELERSQYPMEWGKTFLAFLYALSCFVLTVMISVVHER VPPKEVQFPLPDTFFDHFNRVQWAFSICEINGMILVGLWLIQWL LLKYKSIISRRFFCIUGTLYLYRCITMYVTTLPVPGMHFNCSFK LFGDWEAQLRRIMKLIAGGGLSITGSHNMCGDYLYSGHTVMTLT TVLFIKIKEYSPRLWYHWICWLLSVVGIFCILLAHHDHYTVDDVV AYYITTRLFWYHTMANQVQLKEASQMNLLARVWYRPPQYFEK NVQGI VPRS YHWPPFPVPHLSRQVKYSRLVNDT |
| 6658 | 35 | 855 | HCCALGAPGSPYRGLYFSSAAPCTAPRKAKHQSTLEGLTKRMLM |

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|------------|--|--|---|
| | | | FDPVPVKQEQAMDPVSVSYSPSNYMESMKPNKYGVYISTPLPEKFF QTPEGLSHGIQMEPVDLTVNKRSSPPSAGNSPSSLKFPSSHRRASPGLSMPSSSPFIKKYSPSPGVQPFVPLSMPPVMAAALSRLHGIRSPGILPVIQPVVQPVVPMYTSHLQQLMVSLSEEMENSSSSMQVPVIESYEKPIISQKKIKIEPGIEPORTDYYPEMSPPLMNSVSPQALLQE |
| 6659 | 18 | 523 | EPQRGDCETWFQNCSLPKFVCFPCWGFWLWRAHSMNSLHSLPGLRGLTSISRNLQCTNAMRVINNYQRRWKNQNTFLLATFANVVVCGNPTITCPHNRTLNNCHHSQVQVPLMYCNLTTPSPQNISNCRYAQTANMFYIIVACDNRDQRRDPPQYVVPVHLHTII |
| 6660 | 514 | 1707 | CAASLDCRHHLCPEPMKLVWFSKLLQAAGASARACDSVTSNVLPILLEQFHKHSQSSQRRITILEMLLGLFLKLQKWSYEDKDQRP L NGFKDQLCSLVFMAITDPTQLQLVGIRTLTVLGAQPDLLSYEDLELAVGHLYRLSFLKEDSQSCRVAALASGTLAALYPVAFSSHLVPKLAEBELRVGESNLTNGDEPTQCSRHLCCQLASAVSTHPSIVKETLPLLLQHLWQVNRGNMVAQSSDVIAVCSLRQMAEKCCQDDPESCWYFHQTAIPCLLALAVQASMPKEKPSVLRKVLEDEVLAAMVSVIGTATTHLSPELAAQSVTHIVPLFLDGNVSFLPENSFPSPRFQPFQDGGSSGQRRLLIALLMAFVCSLPRNVSEHIEWEVLLFNLDKVT PG |
| 6661 | 179 | 430 | GVHAASGTLSATWLAEAKMFDLSAKAGKYLGAQAKLMIGMPDYD NYVEHMRVNHDPQTPMTYEEFFRERQDARYGGKGGARCC |
| 6662 | 185 | 423 | RSLPKPAPAQPASIHCAKRFSGVTPPTAKTAMSDGNTAFNALMYC GPKADGNI FSACAPASSAVKASVSVAPQGGQAVIP |
| 6663 | 3 | 1005 | RPVLSRVDDFVPLPETSGRKKLERMYSVDRVSDDIPRTWFPKENLPSFQTASTTMQAISNFRKHLRMVGSRRVKAQTFAEERRER SFSRSWSDPTPMKADTSHDSRDSDDLQSSHCTLDEAFEDLDWDT EGGLEAVACDTEGFVPPKVMILISSKVPKAEYIPTIIRDDPSII PILDHEHATFEDILEEIERKLNLYHKGAKIWKMLIFCQGGPGHLYLLKNKVATFAKVEKEEDMIHFWKRLSRLMSKVNPEPNVIHIM GCVILGNPNGEKLFQNLRLTMTPTPRVTFESPLELSAQGKQMIET YDFRLYRLWKSQRHSLKLLDFFDVL |
| 6664 | 58 | 968 | PRLLRLPRSVVVMDSPWDELALAFSRTSMFPFFDIAHYLVSVMA VKRQPGAALAWKNPISSWFTAMLHCFGGGILSCLLLAEPLKFLANETNILLASSIWIYITFFCPHDLVSQGYSLPVQLLAGMKKEV TRTWKIVGGVTHANSYKNGWIVMIAIGWARGAGGTIITNFERL VKGDWKEGDEWLKMSYPKAVTLLGSVIFTFQHTQHLAISKHNLMPLYTIFIVATKITMTTQTSTMTFAFFEDTLSWMLFGWQPPFS SCEKKSEAKSPSNGVGLASKPVDVASDNVKKKHTKKNE |
| 6665 | 171 | 1278 | DERRLACRQVVTQQRSELYPGFQKRQFLFKAGEAAAQGGRHLPGRNLGPGCTQNPCSVHTATGPEPRKLPLLPDPSNPGYPKEPALCPGIPSPCRMTHQDLSITAKLINGGVAGLVGVTCVFPIDLAKTRLQNHQHGKAMYKGMIDCLMKTARAEGFFGMYRGAANLTLVTP EKAIKLAANDFFRRLMEDGMQRNLKMEMLAGCGAGMCQVVVTC PMEMLKIQLDAGRLAVHHQGSASAPSTSRSYTTGSASTHRRPS ATLIWELLRTQSLAGLYRGLGATLLRDIPFSIIYFPLPANLNN LGFNELAGKASPAHSFVSGCVAGSIAAVAVTPLDVLKTRIQTILK KGLGEDMYSGITDCAR |
| 6666 | 498 | 2868 | MTTFLPVPQMMAGFSFGTFGNPPMESPSAQTIHQPFIVSCLTL WSPGCWQPQIQKEGVGLWDIRKQSSLLRYGGNLSLQASMSVRF NSNGTQLLALRRRLPPVLYDIHSRLPVVQFDNQVYFNSCTMKSCFAGDRDQYILSGSDDFNLYMWRI PADPEAGGIGRVVNGAFMVL KGHRSIVNQVRFNPHTYMICSSGVEKIIKIWSPYKQPGCTGDLG GRIEDDSRCLYTHEEYISLVNLSGSGSLSHDYANQSVQEDPRMMA FFDLSVRREIBQWSSDSDSLSESTILQLHAGVRSERSGYTDSSESASLPRSPPTVDESADNAFHLGLRVTTTNTVASTPPTPTCED |

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|------------|--|--|---|
| | | | AASRQQLSALRRYQDKRLALSNESDSEENVCEVELDTDLFPR PRSPSPEDSSSSSSSSSSSEDEELNERRASTWQRNAMRRRQKT TREDKPSAPIKPTNTYIGEDNDYDYPQIKVDDLSSSTSPSPERST STLEIQPSRASPTSDIESVERKIYKAYKWLRYSYISYNNKDG TSLVTGEADEGRAGTSHKDNPAOSSSKEACLNIAAQRNQDLPP EGCSKDTFKETPRTPSNGPGHEHSSHAWAEVPEGTSQDTGNSG SVEHPFETKLNKALSSRAEPPSPVPKASGSTLNSGSGNCP RTQSDDEERSLETICANHNNRGLHPRPPHNNQNGLGELEV AYSSPGHSDTRDNSSLTGTLLHKDCGSEMACETPNAGTREDD TDTPTDSSRAVHGHSLKRORIELEDDTSENSSSEKKLKT |
| 6667 | 171 | 1310 | AEVERLAAMRSDSLVPGTHTPPIRRRSKPFANLGRIFKPKWKRK KKSEKFKHTSAALERKISMRSREELIKRGVLKEIYDKDGLSI SNEEDSLENGQSLSSSSQLSLPALSEMEPVMPRPDPCSIEVLQPS DIMDGPDPGAPVKLPCLPVKLSPPPLPPKVMICMPVGGPDLSLV SYTAQKSGQGQVAQHHTVLPQIQHQLQYGHGHLPTSTGSL BMHPSGCRMIDELNKTAMTQORLESSEQRVPCSTSYHSSGLHS GDGYTKAGPMGLPEIRQVPTVVICDDNKENVPHESDYEDSSCL YTREEEEDEDDDDSSLYTSSLAMKVKCKDSLAIKPSNRPSKR ELEKNILPRQTDDEERLELRQQIGTKL |
| 6668 | 714 | 358 | TLAVATGPALTLRCHVCTSSSNCKHVVCPASSRFCKTTNTVEP LRGNLVKKDCAESCTPSYTLQGVSSGTSSTQCCQEDLCNEKLH NAAPRTALAHSAISLGLALSLLAVILAPSL |
| 6669 | 459 | 1207 | KDETRKDYDYMLDHPEEYYSHYHYYSRRLAPKVDVRVILVS VCALSVFOFFSWWNSYNKAI SYLATVPKYRIQATEIAKQQGLLK KAKEKGKKNKSKEEIRDEENIKNIIKSKIDIKGGYQKPKQICD LLLFQIILAPPHLCYIVWYCRWLYNFIKGEYGEERLYIIR KSMKMSKQFDSLEDHQKETFLKRELWIKENYEVYKQEQEELK KKLANDPRWKRYRRWMKNEGPGRLTFVDD |
| 6670 | 184 | 594 | VARI*GEAAKMSSEPPPPYPGGPTAPLLEEKSGAPPTPGRSSPA VMQPPPGMPLPPADIGPPPYEPGHPMPQPGFIPPHMSADGTYM PPGFYPPPGPHPPMGYYPPGPYTPGPYFGPGGHTATVLPVSGAA TTVT |
| 6671 | 1 | 763 | LPAEKPRSAFNMAGGRCGPQLTALLAAWIAVAATAGPEEAALP PEQSRVQPMNTASNWTLVMEGENMLKFYAPWCPSCQOTDSEWEAF AKNGEILQISVGKVDVIEPGLSGRFFVTTLPAFFHAKDGIFFR YRGPGEIFEDLQNYILEKKWQSVEPLTGWKSASLTMSGMAGLFS ISGKIWHLHNYFTVTLGIPAWCSYVFFVIATLVFGLSMDLVL*V ISQCNWDFPYRHVS*/RPSTNLGVHTAHTSEHLRL |
| 6672 | 304 | 1089 | APGSKPVQFMDFEKTSFGMSVFNLSNATMGSGILGLAYAMAHT GVIFFLALLLCIALSSYSIHLLLTACAGIAGIRAYEQLGQRAFQ PAGKVVAATVLCIHNVGAMSSYLFIKSELPLVIGTFLYMDPEG DWFLKGNLLIIIVSVLIIPLALMKHLGYLGYTSGLSLTCMLFF LVSVIYKFKQLGLCYRATMKQQWESEALVGTPOPRDSTA AVKAQ MFHS*LTGVLTPQWIMAFVCHPGGAGPSITELCRAFOAQD |
| 6673 | 1116 | 1963 | LQIQTHHTHHGARVTHLGSQHLANAGTMLCRQSSSMAPAFSQ SVTCGSPCVRKQESATKCLHIGACGSDLWARGWEQG*G*GLNV WLCPCVAFHRRGARPAEEGGARWNSLVSSPWIPPNP*HSSIGAE NAVPRP*QG*KVNPSGQERQS\WVLPPLVPGEPLKPLPGLPG*NK SFSRV/SGSKGWILPRQLM*AS*R\TPRFVPGTQWVPITW/PL ITWH*SAPTPLKACPAPRESDPSCSSCLSCPCVTPHPRFSDTGW FGAGHCHSSCDFTRKGAAGGPG |
| 6674 | 1 | 440 | LEFDYMCQYDYEVDRDGDNRDGIYKRVCGNERPAPIQSIGSSL HVLFSHSDGSKNFDGFHAIYEEITACSSSPCFHDGTCVLDKAGSY KCACLAGYTGQRCENLLEERNCSDPG/WPSQWVPENNRGPWAYQ PTPC*IGTRVAFFLT |

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|------------|--|--|---|
| 6675 | 277 | 1678 | GNWPTERMAFLDNPTTILAHIRQSHVTSDDTGMCEMVLIDHDVD LEKIHPPSPMPGDSGSEIQGSNGETQGYVYAQSVDTSSWDFGIR RRSNTAQRLERLRERQNIQCKNIQWKERNKQSAQELKSLFE KKSLKEKPPISGKQSILSVRLQCPQLNNPFNEYSKFDGKGHV GTTATKKIDVYLP LHSSQDRLLPMTVVIMASARVQDLIGLICWQ YTSEGREPKLNDNVSAAYCLHIAEDDGEVDTFPPPLDSNEPIHKF GFSTLALVEKYSSPGLTSKESLFVRINAAGFSLIQVDNTKVTM KEILLKAVKRRKGSQKVSGRADGVFEEDSQIDIATVQDMLSSH HYKSPKVSIMHRLRFTTDVQL/GCALFPGLVRKRAAPVDCLRPS ADTWRQEQIGCCGAACAALRS*DSHKC*EGISGDKVEIDPVTNQ KASTKFWIKQKPI SIDSLLCAC\DLAEE |
| 6676 | 277 | 1678 | GNWPTERMAFLDNPTTILAHIRQSHVTSDDTGMCEMVLIDHDVD LEKIHPPSPMPGDSGSEIQGSNGETQGYVYAQSVDTSSWDFGIR RRSNTAQRLERLRERQNIQCKNIQWKERNKQSAQELKSLFE KKSLKEKPPISGKQSILSVRLQCPQLNNPFNEYSKFDGKGHV GTTATKKIDVYLP LHSSQDRLLPMTVVIMASARVQDLIGLICWQ YTSEGREPKLNDNVSAAYCLHIAEDDGEVDTFPPPLDSNEPIHKF GFSTLALVEKYSSPGLTSKESLFVRINAAGFSLIQVDNTKVTM KEILLKAVKRRKGSQKVSGRADGVFEEDSQIDIATVQDMLSSH HYKSPKVSIMHRLRFTTDVQL/GCALFPGLVRKRAAPVDCLRPS ADTWRQEQIGCCGAACAALRS*DSHKC*EGISGDKVEIDPVTNQ KASTKFWIKQKPI SIDSLLCAC\DLAEE |
| 6677 | 277 | 1678 | GNWPTERMAFLDNPTTILAHIRQSHVTSDDTGMCEMVLIDHDVD LEKIHPPSPMPGDSGSEIQGSNGETQGYVYAQSVDTSSWDFGIR RRSNTAQRLERLRERQNIQCKNIQWKERNKQSAQELKSLFE KKSLKEKPPISGKQSILSVRLQCPQLNNPFNEYSKFDGKGHV GTTATKKIDVYLP LHSSQDRLLPMTVVIMASARVQDLIGLICWQ YTSEGREPKLNDNVSAAYCLHIAEDDGEVDTFPPPLDSNEPIHKF GFSTLALVEKYSSPGLTSKESLFVRINAAGFSLIQVDNTKVTM KEILLKAVKRRKGSQKVSGRADGVFEEDSQIDIATVQDMLSSH HYKSPKVSIMHRLRFTTDVQL/GCALFPGLVRKRAAPVDCLRPS ADTWRQEQIGCCGAACAALRS*DSHKC*EGISGDKVEIDPVTNQ KASTKFWIKQKPI SIDSLLCAC\DLAEE |
| 6678 | 221 | 865 | GPSNQSSGSLSLIVTGCSYWS*INDTCTILRLVSSNFGRO*LR PFPCSQLEMSQGLWHLDCCPWVPYIPGQWRKGRQMRN*QS LLGSDQESVGLDLCVFNFLHVLGLFP*PHELFLLPVVDLG FLFPLLLQGGCHCLVLPANLVSAQPIGKLSRLQTHDLEGSRN HHPLFLVVRWDVAVKHLETVQSGLASLGFGVQHTSHGPP |
| 6679 | 2 | 786 | LEFARGAMPFLGQDWRSPGQNWVKTVDGWKRFLEKSGSFVSDL SSYCNKEVYNKENLFNLSLNYD/SCSQEKEGHA*ONQNS\DPH QEKNIYVHKGSTKERHGYCTLGAFNRDLDFSTAILDSRRFNYV RLLELIAKSQLTSLSGIAQKNFMNILEKVVLKVLQEDQNTILIR ELLQTLTYSLCTLVKRVGKSVLVGNINMWVYRMETILHWQQQLN NIQITRVSGQAQPPPGSGSLHRDTGQTRQDFEFTPVTEESGLF |
| 6680 | 1498 | 2951 | PLCTFLMPSALPGWAGERWEKQWPLA/PFGPTWQTPVGSISSE P\RKNEPDTHCPRGEARPEV*HLPKPHSPGSEGAETSA*ALP /NQVSPQPM*GAENGQDQGGKEEAGEELHRSSSGLTAAPGF EVHRLQTFPGLPSRGGP/GGAGTQGSWAPGEQPP/SPLLPAS MQRSQAGLPGWEAGLVESPTHHIPALRPSGTNATGEAFPTTCS SGP\PAAPPPTGLRPGGSSSGHG**PGLEVGKV\GALGAAQD PQSQGRGPTQGTGTEMLLSGLGSAKACPAARPAVP*LPSDPAS TIPKGTGRGEGPGVLQERNRWVVGRAQGFSTADAAGTAPPGV *LPAPLSQPPGATEPQVRACGMAPPSPGTSGRLVANGRHPPGV AQGCFFGAGCWGSQPRGSQRCPTTYTHSLGHGRAPCPRRCH* WQDPFSSPRTGCLPGIPARQAYSAPRTSRPGIRTGRAAYGPIR FQGGGGG |

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|------------|--|--|--|
| 6681 | 1169 | 511 | INIIYYNQQRAPHELK\EKLMASAPALGLPDLTKLFTLVHVSERE KMTVGVLTQTIVGEWSRPGAYLSKQLDGVSKGWPPCPRALAATAL LAQEADBLTLRQNLNRKSPHA\VVTILNTKGHH*LINARLTRYQ TLLCENPHKTIEVSN/LNPATLLLVTESPVKNCLVLDVSYS SRPNLRDHP*TSVDWELYVDGSGFANPCKVTLLKKETSAPVTPR S |
| 6682 | 109 | 1238 | TVLCGAMQVSSSLNEVKIYSLSCGKSLPEWLSDRKKRALQKKDND VRRRIELIQDFEMPTVCTTIKVSQDGYILATGYKPRVRCYDT YQLSLKFERCLDSEVVTFEILSDDYSKIVFLHNDRYIEFHSQSG FYYKTRIPKFGDRDFSYHYPSCDLYFVGASSEVYRLNLEQGRYLN PLQTDAAENNVCDINSVHGLFATGTIEGRVECDWDPRTNRNVGLL D\AP*TVSQIQR*TSLPTISALKFN\GALTMVAGTTTGQVLLY DLRSKPELLVKDHQYGLPIKSVHFQDSDLILSADSRIVKMNK NSGKIFTSLEPEHDLNDVCLYPNSGMLLTANETPKMGIYYIPVL GPAPRWCSFLDNLTEELEENPESNE |
| 6683 | 109 | 1238 | TVLCGAMQVSSSLNEVKIYSLSCGKSLPEWLSDRKKRALQKKDND VRRRIELIQDFEMPTVCTTIKVSQDGYILATGYKPRVRCYDT YQLSLKFERCLDSEVVTFEILSDDYSKIVFLHNDRYIEFHSQSG FYYKTRIPKFGDRDFSYHYPSCDLYFVGASSEVYRLNLEQGRYLN PLQTDAAENNVCDINSVHGLFATGTIEGRVECDWDPRTNRNVGLL D\AP*TVSQIQR*TSLPTISALKFN\GALTMVAGTTTGQVLLY DLRSKPELLVKDHQYGLPIKSVHFQDSDLILSADSRIVKMNK NSGKIFTSLEPEHDLNDVCLYPNSGMLLTANETPKMGIYYIPVL GPAPRWCSFLDNLTEELEENPESNE |
| 6684 | 111 | 527 | GLRGGTSRGRAGREPEFAAGVLCVAGFCQSPCPGGRGREAPA PP\SGRRHA*RPA*WLGPGGDSGGREEGGS/GELQRAMESKM LPLDINIQEPRWDQSTFLGRARHFFTVTDPNRNLLSGAQLEAS RNIVQNYR |
| 6685 | 258 | 1473 | KLLGDNFEGFCNKFELSDSENGSNS*QSPL\FDRLFDPDQPKVL QGVIDMKNVIGNNKQKANLIVLGA VPRLLYLLQOETSSTELKT ECAVVLGSLAMGTENNVSLLDCHIIIPALLQGLSPDLKFIEAC LRCLRTIFTSPVTPPEELLYTDATVIPHLMALLSRRYTQYEQ IFSHCCCKGEDHQTILFNHGAQVQNIHLLTSLSYKVRMQALKCFS VLAFFENPQVSMTLVNVLDGELLPIFVKMLQDKPIEMQLTSA KCLTYMCRAGAIRTDNCIVLKTLPCLVRMCSKERLLEERVEGA ETLAYLIEPDVELQRIASITDHLIAMLADYFKYPSSVSAITDIK RLDHDLKHAHELRAAFKLYASLGANDEDIRKKVSLGEGRPVLT TASRQGVST |
| 6686 | 310 | 927 | DSVTFDDLAVDFTPKEWTLDDPTQNRNLYRDVMLENYKNLATVGY QLFKPSLSISWLEQBEESRTVQRGDFQASEWKVQLTKELALQDQV LGEPTSSGIQMI GSHNGGEVSDVKQCGDVSEHSCLKTHVTRQN SENTFECYLYGVDFLTLHKKTSTGEQSVFVSHVWKKPSSLNPDV VCQKNRCTRKKKAF*LQTLGKSFH*SIHT |
| 6687 | 181 | 915 | EAMLEAPYKKEEDEQQRKEVKDYPSNTTSSSTNSGNETSGSST IGTSNRSDRDRYRRNRSRSPGRQCRHRSRSDRRHGESR SRDHRREDRVHYRSPPLATGEPVDNLSPEERDARTVFCMLAAR IRPRDLEFFSAVGKVRDRIISDRNRRSKGIAYVEFCEIQSV PLAIGLTGQRLLGVP IIVQASQAEKNRLAAMANNLQKNGGPMR LYVGS LHFNTEDMLRGIFEPFGKV |
| 6688 | 1025 | 1 | AEVPNYPRVFHKKPDSWRFKFPQIQLPYILLSFSSSEKPPISF SEGPLR/SATARMATAAAPPNSSIDLPSDSGMGFIS PAGDSLD LPSDGGTGFFSLAGDSSSTRSLAFISFSLSSSVVGSSAGTTS STSVGSSVVAFTSSSSSSTNRDVAGLDFSTVITSVSGSLVPSRE VAVICGSKGAGASGSASCSSRAGKTTAATAASSMPSGTSSFTSC TMSELEELFSLFSPAPLLSKLFTSSGSIATCCQDSGSPSDTGRS VCQLWLADSDTGKLSDCQEVVTVGDSGGLTCELSLGRM*MSLL |

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|------------|--|--|---|
| 6689 | 640 | 1299 | SSAVIPGYSSSSDSRLNTVPTVDLLCPPTKSSST SSSASYATSATSISDTAFSGSLKLKHGLLSALDSSSRTS*STSS AEDSTFRICSPSVSDTSSDSSGSKDNVILFVKVSI*SCFSLSS FFSDSISFCFSSSSFCR*FVSSKVSQNALSSRLSNGPGSSSK QRNSLTARQLAMSL*ATKF*RNACNPNCLSSSKSAL*LSLNQRF GGASARKPGNISFNSQKCSALSYYCNFVIKPREVSVSSENYPAF |
| 6690 | 1 | 442 | GTRGKMAATLGPLGSWQWRRCLRSARDGSRMLLLLLLLSGSQGP QQVAGQTFEYLKREHSLSKPYQGVGTGSSSLWNLMGNAMVMTQ YIRLTDPMQSKQAGLWNRVPCFLRDWELQVHFQIHGQGGKKNL\H GDGLATWYTKDRMQP |
| 6691 | 287 | 1401 | LKTETSEEKARRYKDRPSQLNAVFBQKQKMIQAQESITLEDVAV DFTWEWQLLGAAQKDLYRDVMLENYNLVAVGYQASKPDALFK LEQGEQLWTIEDGHSAGACSDIWKVDHVLRLQSESLVNRKPC HEHDAFENIVHCSKSQFLGQNHDI FDLRGKSLKSNLTLVNQSK GYEIKNSVEFTGNGDSFLHANHERLHTAIKFPASQKLSTKSQF ISPKHQKTRKLEKHVCECGKAFIKKSWLTDHQVMHTGEKPHR CSLCEKAFSRKFMLTEHQRTHTGEKPYECECGKAFLLKKSRLNI HQKTHTEKPYICSECGKGFQKGNLIVHQRHTGEKPYICNEC /GKGFQKTCIAHQRFHTER |
| 6692 | 178 | 939 | WIKGELSLWERFCANIKAGMPKHI AFIMDGNRRYAKKQVE RQEGHSQGFNKLAE TLRWCLNLGILEVTVYAFS IENFKRSKSEV DGLMDLARQKFSRLMEEKEKLQKHGVCIRVLGDLHLLPLDLQEL IAQAVQATKNYNKCFNLNVCFA YTSRHEISNAVREMAWGEQGLL DPSDISESLDKCLYTNRS PHPDILIRTSGEVRLSDFLWQTS H SCLVFQPVLPWEYTFWNLFEAILQFQMNHSLVQK |
| 6693 | 178 | 939 | WIKGELSLWERFCANIKAGMPKHI AFIMDGNRRYAKKQVE RQEGHSQGFNKLAE TLRWCLNLGILEVTVYAFS IENFKRSKSEV DGLMDLARQKFSRLMEEKEKLQKHGVCIRVLGDLHLLPLDLQEL IAQAVQATKNYNKCFNLNVCFA YTSRHEISNAVREMAWGEQGLL DPSDISESLDKCLYTNRS PHPDILIRTSGEVRLSDFLWQTS H SCLVFQPVLPWEYTFWNLFEAILQFQMNHSLVQK |
| 6694 | 292 | 813 | SLLLHLAPPGAYTPSQPLSSVSTETASSVRRQAESRQHEL PVR EVHSLGQILPDGLTAEAGPPEAQDPWGSPGISLPAAHIGFAAA LAVGPGSGCHTEP\FDEVWPSLFLGDAYAARDKSKLIQLGITHVV NAAAGKFOVDTGAKFYRGMSLEY YGIEADDNPFDDL SVYFLP |
| 6695 | 292 | 813 | SLLLHLAPPGAYTPSQPLSSVSTETASSVRRQAESRQHEL PVR EVHSLGQILPDGLTAEAGPPEAQDPWGSPGISLPAAHIGFAAA LAVGPGSGCHTEP\FDEVWPSLFLGDAYAARDKSKLIQLGITHVV NAAAGKFOVDTGAKFYRGMSLEY YGIEADDNPFDDL SVYFLP |
| 6696 | 1 | 782 | PRVRGRVGERWAFLSVPAAMSSSEMEPLLAWSYFRRRKFQLCAD LCTQMLEKSPYDQAAWILKARALTEMVYIDEIDVDQSGIAEMML DENAIQVPRPGTSLKLPCTNQTGGPSQAVRPITQAGRPTITGFL RPSTQSGRPGTMEQAIPTPTAYTARPTITSSSGRFVRLGTASML TSPDGPFFINLSRLNLTKYSQKPKLAKALIEYIFHHENDVKTALD LAALSTEHSQYKDWK/DQIEKCYRVGM YREAEKQIKSS |
| 6697 | 3 | 782 | PFLFLRLNSRALRPGSRKVMVVPASLSGQDVGSFAYLTTKDR IPQILTQVIDTLHRHKSEFFEKHGEEGVAEKKAI SLLSKLRNE LQTDKPFIPLVEKFPVTDIWNQYLEYQOSSLNESDGKSRWFYSP WLLV\ECYMYRRIHEAI\IQSPPIDYFDVFKESKEQNFYGSQES IALCTHLQQLIRTI EDLD\ENQLKDEFFKLLQISLWGEISVDL SL\SGGESSQNTNVNLSLEDLPKFI LLNDMEHLWSLLSNCK |
| 6698 | 668 | 754 | VGSCACAGSCKCKECKCTSCCKSECRAPP |
| 6699 | 325 | 492 | EGELE/ PARRVLPAMTASAPGRGRPGVGVVVTSCKHPRCV LLGKRKGSVGAGSFQLPGGHLEFGETWECAQRETWEAALHLK NVHFASVVNSFIEKENYHYVTILMKGEVDVTHDSEPKNVEPEKN |

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|------------|--|--|--|
| 6700 | 1098 | 1392 | ESKRIIYNHAFFQESKWSGGILQ TQCWRSSTPGMRTHFRTQF/RLECGQGFSSQENGHCMDTNECQ FFPVCPDVKPVNTYGSYRCRTNKKCSRGEYPNEDGTACVERT LLGLCNLLGK |
| 6701 | 2 | 1485 | AAAGPRTRVRAAFEGQPPSPGLGPTSDKAAAPRTPKRRRLW RQRQ/HPAMLCYVTRPDVLMVEVEAKANGEDCLNQVCRRLGI IEVDYFGLQFTGSKGESLWLNLRNRISQQMDGLAPYRLKLRVKF FVEPHLILQEQTRHIFFLHIKEALLAGHLLCSPEQAVELSALLA QTKFGDYNONTAKYNYEELCAKELSSATLNSIVAKHKELEGT SQ ASAEYQVLQIVSAMENYGIWHSVRDSEGGKLLIGVGPEGISIC KDDFSPINRIAYPVVQMATQSGKNVYLTVTKESGNSIVLLFKMI STRAASGLYRAITETHAFYRCDTVTSVMMQYSRDLKGHLASLF LNENINLGKKYVFDIKRTSKEVYDHARRALYNAGVVDLVSRRNN SPSHSPLKSSSESMNCSSEGLSCQQTRVLQEKLRKLKEAMLCM VCCEBEINSTFCPCGHTVCCESCAQLQVGESAHFCLQPHLSL LLTGSRSQVLAR |
| 6702 | 397 | 1971 | PLAKFLKLDLVNVLCLPMEDVFLFYRTCFCSMGLGSSCHLSLPK RAEALLCSRKATVVRDLVAVRMAEEQEFTQLCKLPAQPSHPHCV NNTYRQAHSQALLRGLLALRDSGLFDVVLVVEGRHTEAHRIL LAASCDYFKGMFAGGLKEMEQUEVLIHGVSYNAMCQILHFIYTS ELELSLSNVQETLVAACQLQIPEIIHFCCDFLMSWVDEENILDV YRLAELFDLSRLTEQLDTYILKNFVAFSRTDKYRQLPLEKVYSL LSSNRLEVSCETEVEYGALLYHYSLEQVQADQISLHEPFLLET VRPFLMEAEVLQRLHDKLDPSPLRDTVASALMYHRNESLQPSLQ SPQTELRSDFQCVVGGGIIHSTPS\MSSATRPKYLNPPLGGEWKH FTASLAPRMSNQGIAVLNNFVYLIIGDNNVQGFRAESRCWRYPD RHNRFQIQSLQOEHADLSVCVVGRIYIYAVAGRDYHNDLNAVER YDPATNSWAYVAPLKREYVAHAGATLEGKMYITCGRKGRT |
| 6703 | 45 | 1244 | GVGPRAAAMPLELELCPRGWVGQHPCTIIAEIGONHQGDLDA KRMIRMAKECGADCAKFKSELEFKFNKALERPYSKHSWGKT YGEHKKHLEFSDHQYRELQRYAEVGIFFTAGSMDMAVEFLHE LNVPPFKVSGDNTNPPYLEKTAK/TRGWHSVLRDVCQVQLNDE TSSWDVLGRVRSKEKVLMLVLDYSGRPMVISSGMSMDTMKQ VYQIVKPLNPNFCFLQCTSAAYPLQPEDVNLRVISEYQKLFDPDIP IGYSGHETGIALSVAVALGAKVLERHITLDTKTKGSDHSASLE PGELAEVLRSVRLVERALGSPTKQLLPCEMACNEKLGKSVVAKV KIPEGTILTMDMLTVKVGEFKGYPPEDIFNLVGKKVLVTVEEDD TIMEE |
| 6704 | 82 | 1007 | TMNTRNRVNSGLGASPASRPTTRDPQDPSGRQGEISPVEDQREG LEAAPKGPSRESVUHAGQRRTSAYTLIAPNINRRNEIQRIAEQE LANLEKWKQNRKAPVHLVPRRLGGSQSETEVRQKQLQLMQSK YKQKLKREESVRIKKEAEAEALQMKKAIQREKSNKLEKKRLQE NLRREAFREHQYKTAEF/ROTEHRIARQKCLSKCCLWPTILN MQQKLGILQ\DSLKAEENRKLQMKDEQHQSLELLEKROQQEQE RAKIHQTEHRRVNNAFDLRLQGSQPGGLEQSGGCWNMNSGNSW GI |
| 6705 | 2 | 786 | RLCRNSARVPCGWSASRSLGEGAGFIGPLRGPHPRAGGTGTSFT SYKRGGIMSTIAAFYGGKSILITVATGFLGKELMEKLFRTSPD LKVIYILVRPKAGQTLQHRVFIQLDSKLFKVI EVRPNVHEKIR AIYADLNQNDFAISKEDMQBELLSCTNIIIFHCAATVRFDLTHA VQINVTATRQLLLMASQMPKLEAFIHISTAYSNCNLKHIDEVII PCPVEPKKIIDSLEW\LDDAIIDEITPKLIRDWPNIIYTYTK |
| 6706 | 130 | 531 | PTHSSSSSHSQEMLGKLNMLRNDGHFCDITIRVQDKIPRAHKVVL AACSDFFRTKLVGQAEDENKNVLDLHHVTVTGFIPLLEYAYTAT LSINTENI IDVLAASVMQMFVASTCSEFNKSSILWNTPNSQP EK |

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|------------|--|--|---|
| 6707 | 2233 | 1343 | YWSGIGYELQHFHWRKFFHEKKGPPSTCQBRLYESRSRWPCIS*GMVVVGWTVANGSW*GGQLRCVCVCTSHSSDSTRSSQASKCHSFFILSQ*KT*SSWENWVFAKYSRIYSYGHSCSKGRGD*DFK*NV SQAR*SRFCGLCNPCGHCGLDINLRGGSSPWTDKHSCVHNLLCNRVVFSLLCGPGHCYQGAVCREACAAASPGLDAAEPHRLCEHTD*LPK*GPGYIQHFHCDNSNILCILYNISFNLFSYSF*GVARYAC*ACHWYFEWLLYNHCGDILVACL*RRQL*SSQ |
| 6708 | 115 | 1729 | TVGSWSRSRSPVGRQLLLTGRGAQAAGSPQGGMALQVELVPTGEIIRVVPHPCKLALGSDGVRVTMESALTARDRVGVQDFVLL ENFTSEAAFIENLRRRFRENLIYTYIGPVLVSVPYRDI.QIYSRQHMERYRGVSFYEEPPHLLAVADTVVRALRTERRDQAVMISVESGAGKTDATKRLLQLYAETCPAPQRGGAVRDRLQSNPVLEAFGN AKTLRNDNSRFGKYMDVQDFKGA*PVGGHILSYLLEKSRVVHQ NHGERNFHIFYQLLEGGEETLRLRLGLERNPQSYLYLVKGQCAK VSSINDKSDWKVVRKALTVIDTFDEVEDELLSIAASVLHLGNHIF AANESNAQVTTENQLKYLTRLSSVEGSTLREALTHRKIIAKG BELLSPNLLEQAAYARDALAKAVYSRTFTWLVGKINRSLASKDV ESPSWRSTTVLGLLDIYGFZVFQHNSEFQFCINYNCEKLQQLFI ELTLKSEQEYEAEGIAWEPVQYFNKKIICDLVBEKFKGII\SI LDE\ECLRPE |
| 6709 | 3 | 894 | PPHEHLFPSSGERGPFSLVSRRLGPGKMGKKGKKEKKGRAEK TAAMEKKVSKRSRKEBEDLEALIAHFQTLDAKRTQTVELPCPP PSPRLNASLSVHPEKDELILFGGEYFNGQKTFLYNELVYVYNIK RDWTWKVDIPSPPPRCAHQAVVVPQGGQLWVFGGEFASPNGEQ FYHYKDLMLVLHLATKTWEQVKSTGGPSGRSGHRMVAWKRLILF GGFHESSTRDYIYNDVYAFNLDFTTWSKLSPSGTGPTPRSGCQ\ IPSLPRAASSVYGGYSKQVRVKDQVDKGTTRHSDMF |
| 6710 | 158 | 980 | RHKMTNRYRVSSSGRAARKMLALMGPAFLAIGYIDPGNFATN IQAGASFGYQLLWVWVANLMMAMLIQILSAKLGIAATGKNLAEQI RDHYPRPVVWFYVWQABI IAMATDLAEFIGAIGFKLILGVSLH QGAVLTGIAITFLILMLQRRGCKPLEKVIIGLGLLVFAAAYIVELI FSQPNLAQLGKGMVIPSLPTSEAVFLAAGVL\GATIMPHVI/YI WHSSLTQHLHGGSRRQRYSATKWDVAIAMTIAGFVNLAIMATAA SELNFYHGTGVA |
| 6711 | 3 | 347 | VTECKTMTCKMSQLERNI*TMINTLHHYSVKLGHPDTLIHGEFK ELVRTDLHNILMKENKNDQAI*HIMEDLDTNAHQIIFKELIML MAMLTWSYHDNMHDADYGPQGQHRPG |
| 6712 | 118 | 578 | PHGQKRTRYPPQVRAPGQQAQALAMALCLQVFAKDKTFRPRKR FEPGTQRFELYKKAQSLKSGLDLRSVVRLLPGENIDDWIAVHV VDFFNRIINLYGTMAERCS*TSQPMAGGPRYEYRWQDERQYRR PAKLSAPRYMALLMDWIESLI |
| 6713 | 2485 | 3 | QARGSDSEDGEFEIQAEDDARARKLGPRPLPTFPPTSECTSDVE PDREMVRQAQKKKKSGGFQSMGLSYPVFKGIMKKGYKVPTPI QRKTIPIVILDGKDVVAMARTSGSKTACFLPMFERLKTHSAQTG ARALILSPTRELALQTLKFTKELGKFTGLKTALILGGDRMEDQF AALHENPDIILATPGRLVHVAVEMSLKLQSVYVVFDEADRLFE MGFABQLQEIILARI.PGGHQTVLFSATLPKLLVFEFARAGLTEPVL IRLDVDTKLNEQLKTSFFLVREDTKAAVLLHLHLNVVRPODQTV VEVATKHAAEYLTLLTTRQVSCAHIYSALDPTARKINLAKFTL GKCSTLIVTDLAARGLDIPLLDNVINYSPPAKGKFLHRVGRVA RAGRSGTAYSLVAPDEIPYLLDLHLFLGRSLTLARPLKEPSGVA GVDGMLGRVPQSVDDEDSGLQSTLEASLELRGLARVADNAQQQ YVRSRPAPSPESI KRAKEMDLVGLGLHPLFSSRFEEELQRLRL VDSIKNYRSRATIFEINASSRDLCSQVMRAKQKQKRAIARFQQ GQQGRQEQQEGPVGPAISRPALEQKQPEKEEEBEGESVEDIFS EVVGRKRQRSGPNRGAARRREEARQRDQEFYIPYPRKDFDSERG |

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|------------|--|--|--|
| | | | LSISGEGGAFFQQAAGAVLDLMGDEAQNLTGRQQLKWRKKRR FVGSGQEDKKIKIKTESGRYISSYKRDLYQKNKQKQKID*S*L GRRRGILTRRRPRTEEVGEARPLAQAGCIPGPHAPRHPLOAESAL ELKTKQQLKQRRRAQKAALSQRWWQALCPQ |
| 6714 | 169 | 1416 | NNCQELLPPPPAPMAHTPSGGAPAGAAPMGFYCVCKVELSVS GQNLDRDVTSKSDPFCVLFTENNGRWIEYDRTEATNNLNPAP SKKFVLDYHFEVQKLKPFALFDQDKSSMRLEHDFLGQFSCSLG TIVSSKKITRPLLLNDKPKAGKGLITIAOELSDNRVITLSLAG RRLDKDLFGKSDPFLFELYKPGDDGKMWLVHRTTEVIKYTLDPVW KPFTVPLVSLCDGDMKPIQVMCYDYDNDGGHDFIGEFQTSVSQ MCEARDSVPLEFECINPKKQKKNYKNSGIIILRSCKINRDSY FLDYILGGCQLMFTVGIDFTASNGNPLDPSSLHYINPMGTNEYL SAIWAVGQIIQDYDSDKMFPALGFGAQLPDPWKVSHFAINFNP TNPFCSGVVDGIAQAYSACL |
| 6715 | 32 | 493 | GPAGAESGSLHCLPATVQALAGAAHSPHGQPPRRGPLIGSGMP GKPKHLGVPPNGRMVLAUSDGELSSTTGPOGGQEGRGSSLSIHS LPSGPSSFPPTTEEQPVASWALSFERLLQDPLGLAYFTEFLKKEFS AENVTFWKACERFQQIPASDT |
| 6716 | 1 | 176 | GAGGPAPRSFSGSEEFRAALERDKMSARAAAAKSTAMEETAIWEQ HTVTTLHRVSLCCSK |
| 6717 | 115 | 896 | LFAMSGFENLNTDFYQTSYSIDDSQSSYDYGSGGPGPYSKQYAG YDYSQGRFVPPDMMPQPPYTGQIYQPTQAYTPASPQPFYGNF FEDEPPLLBELGINFDHIWQKTLTVLHPLKVADGSIMNETDLG PMVFLAFATLLLAGKIQFGYVYGI SAIGCLGMFCLLNLMSMT GVSFGCVASVLGYCLLPMILLSSPAVIFSLQGMVGIIITAGITG WCSFSASKIFISALAMEGQQLLVAYPCALLYGVFALISVF |
| 6718 | 290 | 599 | KQSSIVPGTILPSLKWNSGLCKFPETGGKMTTFKEGLTFKDVA VIFTEELGLLDPVQRNLYQDVMLENFRNLLSVGHHHPKHDFVL LEKEKKLDIMKTATQ |
| 6719 | 1 | 691 | PTREEQDREDGKCHKMEMNPISGNLNCDPIAMSQCSSDHGCET DLSDDDDKIEKPNFMKDSASQDNGLSRKTSRKRVCSDDSDSSL QVVKSSKARTGLLRITRRCAATAANKIKLMSDVEDVSLNVHT RSKNGRKKPLHLACTTAKKKLSDCEGSVHCEVPSEQYACEGKPP DDPDSEGSTKVLSQLNGSDSDMLNSEKHRTNIHKIDAPSK RKSSSVTSSG |
| 6720 | 3 | 822 | HEVAEEAGGTVPQRGTMPGTRFQHVITPEPGKWELTGYEAA VPITEKSNPLTQDLKADAENIVRLGQCDAEIFQEEGQALSTY QRLYSESILTMVQVAGKVQEVLEKPDGGLVVLSSGGTSGRMAF LMSVSNQLMKGLGQKPLYTYLIAGGDRSVVASREGTEDSALHG IEELKKVAAGKKRVIVIGISVGLSAPFVAGQMDCCMNNTAVFLP VLVGFNPVSMARHPFPPRILRSLTVFPPSLRAPHYQITSLLFMS SVVTLLISE |
| 6721 | 3 | 822 | HEVAEEAGGTVPQRGTMPGTRFQHVITPEPGKWELTGYEAA VPITEKSNPLTQDLKADAENIVRLGQCDAEIFQEEGQALSTY QRLYSESILTMVQVAGKVQEVLEKPDGGLVVLSSGGTSGRMAF LMSVSNQLMKGLGQKPLYTYLIAGGDRSVVASREGTEDSALHG IEELKKVAAGKKRVIVIGISVGLSAPFVAGQMDCCMNNTAVFLP VLVGFNPVSMARHPFPPRILRSLTVFPPSLRAPHYQITSLLFMS SVVTLLISE |
| 6722 | 1 | 390 | RSWSKRTWQALPMAVFLFLFLCGTPQAADNMQAIYVALGEAVE LPCPSPSTLHGDEHLSWFCSPAAGSFTTLVAQVQVGRPADDPGK PGRSRLRLGNYSWLWEGSKEEDAGRYWCAVLGQHNYQNW |
| 6723 | 173 | 659 | VCQYCTARMADFGISAGQFVAVVWDKSSPVEALKGLVDKQLALT GNEGRVSVENIKQLLSAHKESSFDIILSLVPGSTTLHSAEIL AEIARILRPGGCLFLKEPVETAVDNNNSKVTASKLCSALTSLGL |

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|------------|--|--|---|
| 6724 | 173 | 659 | VEVKELQREPLTPEEVQSVREHLGHESDNL VCQYCTARMADFGISAGQFVAVVWDKSSPVREALKGLVDKQLQALT GNEGRVSVENIKQLLSAHKESSFDIILSGLVPGSTTLHSAEIL AEIARILRPGGCLFLKEPVETAVDNNSKVKTASKLCSALTLSGL VEVKELQREPLTPEEVQSVREHLGHESDNL |
| 6725 | 356 | 722 | RRRTPPVILATMDDDLMLALRLQEEWNLQEAERDHAQESLSLVD ASWELVDPTPDLOALFVQFNDQFFWGQLEAVEVKWSVRMTLCAG ICSYEGKGMCSIRLSEPLKLRPRKDLVEVFFV |
| 6726 | 98 | 714 | HLQKMERKINRREKEKEYEGKHNSLEDTDQGNCKNSTLMTLNVG GYLYITQKQTLTKYPDTFLEGIVNGKILCPFDADGHYFIDRDGL LFRHVLNFLRNGELLPEGFRENQLLAQEAFFOLKGLAAEEVKS RWEKEQLTPRETTFLBITDNHDSRQGLRIFCNAPDFISKIKSRI VLVSKSRLDGFPPEEFSISSNIIQFKYFIK |
| 6727 | 1 | 831 | FRGMGDERPHYVGKHTPQKYDPTFKGPIYNRGCTDIICCVFLL LAIVGVAVGIIAWTHGDPKRVITYPTDSRGFCGQKGTKNENKP YLFYFNIVKASPLVLEFQCPPTQICVEKCPDRYLTLYLNARSS RDFEYKQPCVPGFKNNKGVAEVLRDGDCPAVLIPSKPLARRCF PAIHAYKGVLMVGNETTYEDGHGSRKNITDLVEGAKKANGVLEA RQLAMRIFEDYTVSWYWDIISLGIAMAMSLFIIILRFLAGIMG RGMIIIMGILVLGY |
| 6728 | 486 | 935 | FCSSWLRLSLADSSLSWKMFVLVGLTGGIAGSKSSVIQVFOQLGCA VIDVDVMARHVQPGYPAHRRIVEVFGTEVLENGDINRKVLGD LIFNQPDRLNLAITHPEIRKEMMKETFKYFLREPRTPRGGK HVPSALKEADSLMRDT |
| 6729 | 259 | 1191 | VGLTGAQSGRTASMGDRQRAVAGPALRRWLLGTVTVGFLAQSV LAGVKKFDVPCGGDRDCSGGCQCYPEKGGRGQPGVPGQYNGPP GLQGFPGQGRKGDGGERGAPVGTGPKGDVGARGVSGFPDADGI PGHPGQGGPRGRPGYDGCNGTQGDSDGPPGSGEFTGPPGPGQ PKGQKGEYPALPKEERDRYRGEPEGLVGFQGGPPGRPGHVGM GPVGAPGREGPPGPGPKGQGNRGLGFYGVKGEKGDVGQPGPN GIPSDTLHPIIAPTGVTFHPDQYKGEKGSSEGEPIRGISLKGEE GIM |
| 6730 | 784 | 1015 | NMVDYYEVLGLQRYASPEDTKKAYHKVALKWHPKNPNKEEAE RKPFKEVAEAYEVLNDEKRDIDKYGTEGLNEF |
| 6731 | 1 | 446 | GIRKRLHGAVVPRVEVGCPCWETRESEGVHLERPTSPLKNDEGS LDIYAGLDSAVSDSASKSCVPSRNCLDLYEEILTEEGTAKEATY NDLQVEYGGCQLQMKELMKKFKEITQNFSLINENQSLKKNISA LIKTRARVEINRKDEET |
| 6732 | 102 | 1205 | GRWQRRPPPPSPPLWCLQPGGSDPQOLTQLRHCLSHSPQDTPW AQRQVCYTAATTQAAAPATRNCLPDHSGHRPTPPRSHRHHQEN LGSIKPSSSRSTKATSTTMAGDGRRAEAVREGWGVYVTPRAPIRE GRGRLAPQNGGSDAPAYRTPPSRQGRREVRFSDPEPEVYGDDE PLVAKERSPVGKTRTRLEEFSDSAKEEVRESAYYLRSRQRRQPR POETEEMKTRRTTRLQQQHSEQPPLQPSVMTRRGLRDSHSSSE DEASSQTDLSQTISSKTVRSIQEAPAVSEDLVIRLRPPPLRYPR YEATSVQQKVNPFSEEGETEEDDQSSSHSVTVKARSRDSDESG DKTTRSSSQYIESFW |
| 6733 | 613 | 1311 | RSCRQVGMRSRNQGGESASDGHISCPKPSYIGNAGEKSLSEDAK KKKSNRKEDDVMSGTVKRHLKTSGBECERKTKKSLSESKEDLI QLLSIMEGELQAREDDVIHMLKTEKTKPEVLEAHYGSAPKVLRL VLHRDAILAQEKSIGEDVYEKPISELDRLEKQKETYRRMLEQL LLAEKCHRRTVYELENEKHKHTDYMNKSDDFTNLLEQERERLKK LLEQEKAYQARKE |
| 6734 | 189 | 551 | SAAMFPVFGSCFQELQEKNSLELVSPFEVAVHFTWEWQDLDD AORTLYRDVMLETYSSLSVLGHCITKPEMIFKLEQGAEPWIVEE |

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|------------|--|--|---|
| 6735 | 280 | 558 | TLNLRLSGGSKKQVFSGICHRSLVELQEVHLV KSRAGVTKMSNPFLKQVFNKDKTFRPKRFEPGTORFELHKKA QASLNAGLDRLAVQLPPGEDLNDWVAVHVVDFFNRVNLITYGTI XDGCT |
| 6736 | 195 | 808 | MNYELNFKREMPNISKSLGLTNLNLFLKRLSSVLPLITDYVYFEN SSNPYLIRRIEELNKTASGNVEAKVVCFYRRRDISNTLIMLAD KHAKEIEBESETTVEADLTDKQKHQLKRELFSLRQYESLPATH IRGKCSVALLNETESVLSYLDKEDTFFYSLVYDPSLKTLLADKG EIRVGPRYQADIPPEMLLEGTFFCVFAVL |
| 6737 | 150 | 1209 | PVIMPLHFSPGDIVRPSCCVSSSPKLRRAHRSLESYRFDLTL REDTGCNLQHISDRENIDDLNMEFNPSPDHPRASTIFLSKSQTDV REKRKSLFINHHPPGQIARKYSSCSTIFLDDSTVSQPNLKYTIK CVALAIYHIIKNRDPDGRMLLDIFDENLHPLSKSEVPFDYDKHN PEQKQIYRFVRTLFSAAQLTAECAIVTLVYLERLLTYAEDICP ANWKRIVLGAILLASKVWDDQAVWVNDYQCILKIDITVEDMNELE RQFLELLQFNIINVPSSVYAKYFDLRSLAEANLSPLEPLSRE RAHLEAISRLCEDKYKDLRRSARKRSASADNLTFRWSPAIIS |
| 6738 | 148 | 653 | CACAEQPARAEVGAATAPVRWASGEMAPSGSLAVPLAVLVLLL WGAPWTHGRRSNVRVITDENWRLELEGDWMIEFYAFWCPACQNL QFEWESFAEWGEDLEVNIKVDVTEQPGLSGRFIIITALPTIYHC KDGEFRYQGPRTKKDFINFISDKEWKSIEPVSSWF |
| 6739 | 3 | 631 | SWPDMAEVEEVAKLEKHLMLLRQEVYVKLQKLAETEKRCALLAQ ANKESSESSEFISRLLAIVADLYEQEQYSDLKIKVGDRIHSAHKF VLAARSDSWSLANLSSSTKELDLSANPEVTMTMLRWIYTDLEF REDDVFLTELMKLANRFQQLLRERCEKGVMSLVNVRNCIRFYQ TAEELNASTLMNYCAEI IASHWVSEVEGVNKAL |
| 6740 | 3 | 631 | SWPDMAEVEEVAKLEKHLMLLRQEVYVKLQKLAETEKRCALLAQ ANKESSESSEFISRLLAIVADLYEQEQYSDLKIKVGDRIHSAHKF VLAARSDSWSLANLSSSTKELDLSANPEVTMTMLRWIYTDLEF REDDVFLTELMKLANRFQQLLRERCEKGVMSLVNVRNCIRFYQ TAEELNASTLMNYCAEI IASHWVSEVEGVNKAL |
| 6741 | 141 | 960 | PLTLPFSSRARAGHTMNTSPGTVGSDPVILATAGYDHTVRFWQA HSGICTRTVQHQSQVNALEVT PDRSMIAAAVQPVSLGYQHIRM YDLNSNNPNPI ISYDGVNKNIASVGFHEDGRWMTGGEDCTARI WDLRSRNLQCQRIFQVNAPINCVCLHPNQAELIVGDQSGAIHIW DLKTDHNEQLIPEPEVSITSAHIDPDASYMAAVNSTLVPPFSCLL PLAIGILQEGEFESLARRGLLFLACQGCNCYVWNL TGGIGDEVTO LIPKTKIP |
| 6742 | 141 | 960 | PLTLPFSSRARAGHTMNTSPGTVGSDPVILATAGYDHTVRFWQA HSGICTRTVQHQSQVNALEVT PDRSMIAAAVQPVSLGYQHIRM YDLNSNNPNPI ISYDGVNKNIASVGFHEDGRWMTGGEDCTARI WDLRSRNLQCQRIFQVNAPINCVCLHPNQAELIVGDQSGAIHIW DLKTDHNEQLIPEPEVSITSAHIDPDASYMAAVNSTLVPPFSCLL PLAIGILQEGEFESLARRGLLFLACQGCNCYVWNL TGGIGDEVTO LIPKTKIP |
| 6743 | 1 | 412 | MHSTQDKSLHLEGDPNPSAAPTSTCAPRMPKRISSISKQLASVK ALRKCSDLKAIATTAIIFRNSSDSGKLEKAIADLLQTQFRN FAEGQETKPKYREILSELDEHTENKLD FEFMILLISITVMSDL LQNIR |
| 6744 | 95 | 1343 | RTPARNRCAGCEVLSRFSSPNKASSPALQSAGGGLPAVRALRRD RQKVSTVGYGMDEVEQDQHEARLKELFDSFDTTGTGSLGQEEIT DLCHMLSLLEEVAPVLQQTLLQDNLLGRVHFDQFKEALILLSRT LSNEEHFQEPDCSLEAQPKYVRGGKRYGRSLPEFQESVEEFPE VTVIEPLDEEARPSHIPAGDCSEHWKTQRSEYEAEQGRLRFWNP DDLNASQSGSSPPQDWIEEKLQEVCEDLGTRDGHNLNRKKLVS I |

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|------------|--|--|--|
| | | | CEQYGLQNVGDGEMLEEVFHNLDPDGTMVSVEFFYGLFKNGKSLT PSASTPYRQLKRHLSMQSFDESGRRTTTSSAMTSTIGFRVFSCL DDGMGHASVERILDWQEEGIENSQEIILKALDPGLDGNINLT TLALENELLVTKNSIHOACI |
| 6745 | 1 | 588 | TFRDQGWQRRLWLLGCASWESWEAAIAAGPGLPSSTARQONNP AAGTECFAAVWARGTAMGSVLSTDSGKSAPASATARALERRRDP ELPVTSDCAVCLVHLHQPVRTRCGHVFCRSCIATSLKNNKWT PYCRAYLPSEGVPAFDVAKRMKSEYKNCACEDTLVCLSEMR RTCKYIDKYGLQLEETA |
| 6746 | 110 | 492 | GATGAMAESAPARHRRKRSTPLTSSSTLPSQATEKSSYFQTTEI LSWTVVAAIQAVEKKMESQAARLQSLEGRTGTAEKKLADCEKMA VEFGNQLLEGKWAVALGTLLOEYGLLQRRLENVENLLRNRN |
| 6747 | 247 | 484 | EAVTFKDVAVVFTEELGLLDLAQRKLYRDVMLENFRNLLSVGH QPFHRDTFHLREEKFWMMDIATQREGNSVYAGVC |
| 6748 | 201 | 665 | MTTFKEAVTFKDVAVVFTEELGLLDPAQRKLYRDVMLENFRN LSVGNQPFHQDTFHLGKEKFWKMKTTSQREGNSGGKIQIEMET VPEAGPHEEWSQQIWEQIASDLTRSQNSIRNSSQFFKEGDPVC QIEARLSISXVQQKPYRCNECKQ |
| 6749 | 95 | 719 | RREVKGGDGVCPFRARGSPQSQQFPSCAGGEGELQSQGEALDGM SAGGPCFAAAGGGPGGASCSVGAPGGVSMFRWLEVEKEFDKAF VDVDLLGEIDPDQADITYEGRQKMTSLSSCFAQLCHKAQSVSQ INHKLEAQLVDLKSLELTQAEKVVLEKEVHDQLQLHSLQLQL HAKTQQSADSGTTAKLSGSPVEELERELKAN |
| 6750 | 3 | 428 | SCESRRPGAKWVWASGALPRDTTGLGSEQPSGDVAQSNRATMGT TAPGPILHLELCDQKLMFLCNMNDKDLVWLEEIQEEAERMFTR EFSKEPELMPKTPSQKNRRKKRRISYVQDENRDPIRRRLSRRKS RSSQLSSRR |
| 6751 | 152 | 1417 | PTKATEMAGASVKVAVRVPFNSREMSRDSKCIITQMSGSTTTI NPKQPKETPKSFSDYSYWSHTSPEDINYASQKQVYRDIGEEM QHAFEGYNVCI FAYGQTGAGKSYTMMGKQEKDQGGIIPQLCEDL FSRINDTTNDNMSYSVEVS YMEIYCERVDLLNPKNGNLRVRE HPLLGPPYVEDLSKLAVTSYNDIQDLMDSGNKARTVAATNMNETS SRSHAVFNIIFTQKRHDAETNITTEKVKISLVDLAGSERADST GAGKTRLKEGANINKSLTTLGKVISALAE MDSGPNKNKKKKKT FIPYRDSVLTWLLRENLGNSRTAMVAALSPADINDETSLTLR YADRAKQIRCNAVINEDPNNKLIRELKDEVTRLRLDLLVAQGLGD ITDMTNALVGMSPSSSLSALSSRN |
| 6752 | 24 | 1834 | RNCVPPLCYRSRVKFSHSDIKMQYSHHCEHLLERLNKQREAGFL CDCTIVIGEFQFKAHRNVLASPFSEYFGAIYRSTSENNVFLDQSQ VKADGFQKLEFIYTGTLNLDNWNVKEIHQAADYLVKEEVVTKC KIKMEDPAFIANPSSSTEISSITGNIELNQQTCLLTLRDYNNREK SEVSTDLIQANPKQALAKKSSQTKKKKKAFNSPKTGQNKTVQY PSDILENASVELFLDANKLPTPVVEQVAQINDNSELELTSVVEN TFPAQDVIHTVTVKRKRGKSQPNCALKEHSMNSIASVKSPEAE NSGEELDQRYSKAKPMCNTCGKVPSEASSLRHMRHKGVPYV CHLCKAFTQCNQLKTHVRHTGKPKYKCELDKGFAQKCOLVF HSRMHGEKPKYKCDVNCNLFATSSNLKIARKHSGEKPYVCDR CGQRFQAQSTLTTHVRRHTGKPYVCDTCGKAFVSSSLITHSR KHTGEKPFICELCGNSYTDIKNLKHKTKVHSGADKTLDSAE HTLSEQDSIQKSPLSETMDVKPSDMTLPALPLGTBDHMLLPV TDTQSPSTDTLLRSTVNGYSEPLIFLQQLY |
| 6753 | 2 | 1305 | VPSLPYPQKVVAAHTEFTTSSDSETANGIAKPDVPMGGEKAS PFGIKLRRNTNYSRNFNCQQABQKKKRHSSTGDSADAGPPAAG SARGEKEMEGVALKHGPSLPQERKQAPSTRDSAEPSSSRSVPV AHPGPPASSQTPAPEHDKAANKMPLAQKPALAFKPTSQTTPAS |

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|------------|--|--|---|
| | | | PLSKLSRPYLVELLSRRAGRPDPPEPSEPSKEDQESSDRPPSPFP GPEERKQKRDDEEEATERKPASPPLPATQOEKPSQTPEAGRKE KPMLQSRHSLDGSKLTEKVETAQPLWITLALQKQGFREQQATR EERKQAREAKQAEKLSKENVSVSQPGSSSVSRAGSLHKSTALP EEKRPETA VSRLEERREQLKANTLPTSVTVEISYSSPAAPLVKE VSKRFSSPDDAPVSSEPAWLALAKRKAKAWSDCPLIIK |
| 6754 | 2 | 413 | FVRRRRRLGGPEVNTMSSLHKSRIADPDVLKEPSIALEKLRE LSFSGIPCEGGLRCLCWKILLNYLPLERASWTSILAKQRELYAQ PLREMI IQPGIAKANMGVSREDVTFEDHFLNPNPDSRWNTYFKD NEVLL |
| 6755 | 298 | 1343 | PGLQLQVALEADWFLDMPGRRGSPSRQQLSRALPSLQTLVGGG CGNGTGLRNRNGSAIGLPVPPITALITPGPVHRHCIPDLVPDGS LLFEPLFFIYLLVALFIQYINIKTVWVYPYHNPASCTSLNFHL IDYHLAAFTVMLARRLVWALISEATKAGAASMIHYMVLISARL VLLTLCGWVLCWTLVNLFRSHSVNLNLEFLGYFPVGVVPLCCFHQ DSRAHLLLDYNYVVQHEAVEESASTVGGAKSKDFLSLLESL KEQFNATPIPTHSCPLSPDLIRNEVECLKADFNRHRIKEVLFNS LFSAYYVAFPLCEVVKVSGYLTFMCFDLDCVNYINWVFLV |
| 6756 | 180 | 754 | TERALGSLPLSTPVSWGSLRTLKYQQQLRPFKVLCCQTRVQCHD LRLSQPQPGLKQSFCLRVGLQGTATPGLRDLTCKELIILTE REAQKRKKRKEKESGMALTQGLPTFRDVAIEFSQEWSLDPVQ KALYWDVMLENYRNLVFLGKDNFALEVKICPRVFLYFLCCLSW PFHYLTETEALLTHK |
| 6757 | 2 | 459 | NSRVEAPEAHSRESQGSAMRKHLSWNNLATVCMLLFSHLSAVQ TRGIXHRKIKWNRKALPSTAQITAEQVAENRPGAFIKQGRKLID FGAEGNRYEANYWQFPDGIHYNGCSEANVTKEAFVTGCINATQ AANQGFQKPDNKLHQQVLW |
| 6758 | 1 | 1008 | ASGPFLPGRRPRDRAPWLPARLLRGVLAVVVSLSALGPGSFCCR RVPSLAQLGHSEAAPSPDDVRWSRVPDRCEERDRANPPPPPS LPSPFRNRMANNSPALTGNSQPQHQAASAAAAQQQQCGGGGATK PAVSGKQGNVLPWNGNEKTMNLNPMILTNLSSPYFKVQVYELK TYHEVVDEIYFKVTHVEPWKEGSRKTAGTGMCGGVGVGTGGI VSTAFCLLYKLFTLKLTRKQVMGLITHTDSPYIRALGPMYIRYT QPPTDLWDWFESFLDDEEDLDVKAGGGCVMTIGEMLSRFLTKLE WFSTLFPRI PVPVQKNIDQQIKTRPKI |
| 6759 | 1 | 513 | RKHNFHSLDGTSTRAFHPTGLPLSSPVPQRKTQSGCFDLDS LLHLKSFSSRSPRCLNIEDDDPIHEKPFLLSSSAPPITSLSLG NFEESVLNRYRFDPLGIVDGFTEAVGASGAFCTHLLPVEVSFY SVSDDNAPSPYMGVITLESIGKRGYRVPPSGTIQVVCVL |
| 6760 | 239 | 606 | VLSKKKGLSABEKRTRMMEIFSETKDVFLKDLKIAPEKEGKIT AMSVKEVLQSLVDDGMVDCERIGTSNYWAFPSKALHARKHKL VLESQLESGSQKHASLQKSIEKAKIGRCETEERT |
| 6761 | 29 | 1733 | ERTLRGLREVAAPSDVADAASRRGRCCCLHCTQTQVAQDCPS SSSVQRCLESLFQSLHTMTSKKLVSNSVAGCADDALAGLVACNP NLQLLQGHRAVLRSDLSLKGVRALLSGGGSGHEPAHAGFIGKG MLTGVIAGAVFTSPA VGSILAAIRAVAQAGTVGTLIVKNYTG RLNFGLAREQARAEIPVEMVIGDSDAFTVLKKAGRRGLCGTV LIHKVAGALAEAGVGLLEIIAQVNVVTKAMGT LGVSLSSCSVPG SKPTFELSADVELGLGIHGEAGVRRIKMATADEIVKLMDHMT NTTNASHVFPVQPGSSVMMVNNLGLSLFELGI IADATVRSLEG RGVKIARALVGTFMSSALEMPGISLTLLLVDEPLLKLIDAETTAA AWPNVAVSI TGRKRSRVAPAEQAPDSTAAGGSASKRMALVL ERVCS TLLGLEEHLNALDRAAGDGDGCTTHSRAARAIQEWLKEG PPASPAQLLSKLSVLLLEKMGSSGALYGLFLTAQAQPLKAKT SLPAWSAAMDAGLEAMQKYGKAAPGDRMTLDSLWAAGQEL |

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|------------|--|--|---|
| 6762 | 3 | 613 | ASTISWRLCVAGAEARRPVVAGERAGGGAMWFMVLLSWLSLFI QVAFITLAVAAGLYYLAELIEEYTVATSRIIKYMIWFSTAVLIG LVVFERFPTSMIGVGLFTNLVYFGLLQTFPFIMLTSPNFILSCG LVVVNHYLAFQFFABEYYPFSEVLAYFTFCLWIIPFAFFVLSA GENVLPSTMQPGDDVVSNYFTKGRKG |
| 6763 | 2 | 760 | SGDFPGRFRFGCCCVRPAGAGMELGGHWDNMSAPRLVSETAE RKQEQKTGTAEAADSGAVGARFLLCLYLGGFLDLFGVSMVVP LSLHVKSLGASPTVAGIVGSSYGILQFSSTLVGCWSDVVGRR SLLACILLALSALGYLLGAATNVFLFVLARVPAGIFKHTLSISR ALLSDVVPKERPLVIGHFNTASGVGFI LGPVVGGVI TELEDGF YLTAFICFLVFI LNAGLVNFFPRREAKPGSTE |
| 6764 | 80 | 438 | LKKMDTMMLSVRNLFQQLVRRVEILSEGNEVQFIQLAKDFEDFR KKWQRTDHLGKYKDLLMKAETERSALDVLKXARNQVDVEIKR RQRAEADCEKLERQIQLIREMLMCDTSGSIQ |
| 6765 | 3 | 550 | ARYSRVDHFCRRRCRAVARAPFLLQFPSPSRHFLAACVARWL RGSVLVSEALSGSAMDGIVTEVAVGVKRGSDLLSGSVLSSPNS NMSSMVVTANGNDSKKFKGEDKMDGAPSRVLRHKLPGEVTE TE VIALGLPFGKVNTILMLKGKNQAFLELATERAAITNGNYSAVT PHLRNQ |
| 6766 | 1 | 1287 | EGGSFKASLTWLWPLGEMKLHCEVEVISRHLPALGLRNRGKGV RAVLSLCQQTSSRSQPPVRAFLLISTLKDCKRGTRYELRENI EQFFT KPVDEGKATVRLKEPPVDICLSKANSSSLKGFSLAMRLAHRGCN VDTVPSTLTPVKTSEFENFKTKMVTISKDYPLSKNFFYSLEHL QTSYCGLVVRDMRMLCKSLRKLDSLHNHKKLPATIGDLIHLQ ELNLDNHNLESFVSALCHSTLQKSLWSLDLSKNKIKALPVQPCQ LQELKNLKLDDNELIQFPCKIQQLINLRFLSAARNKLPPLPSEF RNLSELYLDFGNTFEQPKVLPVILQAPLTILESSARTILHNR IPYGSIIIPFHLQDLDTAKICVGRFCLNSFIQGTITMNLHSV AHTVVLVDNLGGTEAPIISYFCSLGCYVNSDI |
| 6767 | 336 | 919 | APMICLCSDDLQFRYKEAFLDRGLQGYCSVDDDFRMKHLNV GRLOSDNEYKKDFAKRSRQFHSSTDPGLLQAKRSQQLASDVHY RQPLPQPTCDPEQLGLRHAQKAHQSDVKYKSDNLNLRGCVGT PPGSYKVMARRAAELANARGLGLQAYRGAEAVEAGDHQSGEV NPDATEILHVKKKKALL |
| 6768 | 2 | 363 | PGSTISCYLLSEGLPLCMQVACGEEKHRAPTMKTLRARFKKTE LRLSPDTLGSCPPCGPCPIPKPAARORRQSQDWGKSDERLLQAV ENNDAPRVAALIAKGLVPTKLDPEGKSAFHL |
| 6769 | 284 | 396 | MSTPDFSTAENNQELANEVSCIKAMLTLMQAMQAD |
| 6770 | 1 | 397 | QRNYQVINSSTMAKLHDYKDEVVKLMTFNYNSVMQVPRVEK ITLNMGVGEAIADKKLLDNAADLAAISGQKPLITKARKSVAGF KIRQGYPIGCKVTLRGERMWEFFERLITIAVPRIRDPRGLSAKS |
| 6771 | 3 | 378 | APAGTLAMTGKSVKDVDRYQAVLANLLEEDNKFCADCQSKGPR WASWNIGVFICIRCAIGHNLGVHISRVKSVNLDQWTQEQIQCM QEMGNGKANRLYEAYLPETFRPQIDPYLFWSNLEG |
| 6772 | 1 | 1400 | AAAFLOQMTVNGFINTVITSL\ERRYDLHSYQSGLIASSYDIAA CLCLTFVSYFGSG\HKPRWLWGR\VLMTGSLVFPALPHFTAG P**GWKLDAGVRTCPANPR\PVCAG\HTSGLSRYQLVFMGLQFL HGVGATPLYTLGVTYLDENVKSSCSPYIAIFYTAAILGPAAGY LIGGALLNIYTEMGRRTTELTTESPLWVGANWVGLGSGAAAFPT AVFILGYPROLPQSQRVAVMRAEMHQLKDSRGEASNPDGKT IRDLPLSIWLLKXNPTFILLCLAGATEATLITGMSTFSPKFLES QFSLSAFEATLFGYLVVPAGGGTFLGGFFVNKLRLRGSVIAK FCLFCTVVSLLGILVFSLHCPSPVMAGVTASYGGSLLPEGHNL TAPCNAACSCQPBHYSVPCGSDGLMYFSLCHAGCPAATETNVDG QKVYRDCSCIPONLSSGFHATAGKCTST |

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|------------|--|--|---|
| 6773 | 1 | 630 | PWEAPKEHKYKAEHTVVLTVTGEPCHEFFQYHRQLYHKCTHKG RPGPQWCATTNFQDQQRWGYCLEPKKVKDHCSEKSPCQKGGT CVNMPSPGPHCLCPQHLTGNHCQKEKCEPQLLRFFHKNEIWR EQAAVARCQCKGPDACQRLASQACRTNPLHGGRCLEVEGHRLL CHCPVGYTGPPCDVGE*GSGASRRPAPRWGLAR |
| 6774 | 146 | 389 | LTELSDQYFLEFFILSS/WVPTFLSMDVDGRVIKADSFSKI ISS GLRIGFLTGPPLIERVILHIQVSTLHPSTFNQLMISQ |
| 6775 | 104 | 614 | TCPSQLRVLTARGRRAPSPQLWTLVLALIEEKWRSHRI LRMS GRPETMENLPALYTI FQGEVAMVTDYGAFIKIPGCRKQGLVHRT HMSSCRVDKPEI VDVGDVWVKLIGREMKNDRIKVSLSMKVVN QGTGKDLDPNNV\SLSKKRGGGDPSRITLGRSPLRLS |
| 6776 | 3 | 1108 | HERHERHEGALSQDALLRISIPLDSNMREKCRFVHPQWQLLH LNGTFPNTSDADMEPCVDGWVYDRISFSSTIVTEWDLVCDQS TSVAKFVFMAGMMVGGILGGHLSDRFGRFVLRWCYLQVAIVGT CAALAPITFLYCSLRFLSGIAAMSLITNTIMLIAEWATHRFQAM GITLGMCPSGIAFMTLAFLAFAIRDWHILQLVSVVPYFVIFLTS SWLLESARWLI INNKPEGLKELRKAHRSGMKNARDTLTLEIL KSTMKELEAAQKKKPFGLERLHMPNICKRISLLPFTKPFANFMA YFGLNLHG/LKHLGNVFLQLTFLGAV/TPPGQLVHLGHWSG RVSSRGVNCGLGLFVLQVW |
| 6777 | 779 | 63 | CFHGPARDCEVRATFAKKQGGSGIISCIASFAPQPLACGSY GRSLGLYAWDDGSPALALGGHQGGITHLCPHDGNRRFSGARKD AELLCWDLRQSGYPLWSLGREVTTNQRIYFDLPTGQFLVSGST SGAVSVWDTDGGPNDGKPEPVLSFLPQKDCNTNGVSLHPSLPLG HCLPVSVCFSLPTESGRRRGAGPSLSPRRHVHLECRLLQWLWC CGGARLQHP**SPRARKGR |
| 6778 | 311 | 805 | IQSITDESRSIRRRKNPANTRLRINVP/EETAGDSE/ERSPEEB VQADPRIRASPKCPTSSPPFKGRSPGEGET\DPKVVHFHGP KDKSVAEKN\KGP\SPVSSGIGKDFFSMKPEWENLQSNVRMH T\AVRLNEVIVKSRDAKLVLNMPGPPRRNRNGDENY |
| 6779 | 2 | 535 | RALRRQPRLLAANGIEPESMAISEPIKGRKPCVNKEELAKKP MAKCAWKGPREEPPQDARAESAESPGGASESDQGGHESPPKKAV AWVSAKNEAPMRKKKVSLSGPVSVLVDSERGRKKPVMPKKGPG SRREASDQKAPRGQPAEATASTSRGPKAKPEGSPRRATNESRK V |
| 6780 | 3 | 403 | HEVNDNKPEININLMSPGKEEISYIFEGDPIDTFVALVRVQDKD SGLNGEIVCKLHGHGHFKLQKTYENNYLILTNATLDREKRSEYS LTVIAEDRGTPSLSTVKHFTVQINDINDNPPHFQSRSEYFVISE K |
| 6781 | 1 | 1269 | APTRPVFPTLQDLSSSKEPSNSLNLPHSNELCSSLVHPELSEVS SNVAPSIPPVMSRPVSSSSISTPLPPNQITVFVTSNPIITTSANT SAALPTHLQSALMSTVVTMPNAGSKVMVSEGSAAQSNARPQFI TPVFINSSSIIQVMKGSQSPSTIPAAPLTNSGLMPPSVAVVGPL HIPQNIKFSAPVPPNALSSSPAPNIQTGRPLVLSSRATPVQPL SPPCTSSPVVPSHPVQVQVKELNPDASPVNTSADQNTLPSSQ STTMVSPLLTNSPGSSGNRRSPVSSSKGKGKVDKIGQILLTKAC KKVTGSLEKGEQYQADGETEGQGLDTTAPGLMGTEQLSTELDS KITPTTPAPTLLKMTSSPVPGTASAGPSLPGALPTSVRSIVTT LVPELISAVPTTKSNHGGIASESLAG |
| 6782 | 3 | 1327 | RKPTVIRIPAKPGKCLHEDPQSPPLPAEKPIGNTFTSVSGKLS NVERTRNLESNHGQGTGGFVRVPPRLPPRPVNGKTIPTQPPPK VPPERPPPKLSATRRSNKKLPFNRSSSDMLQKKQSNLATGLS KAKSQVFNQDVPVLPFRPKPGHPLYSKYMLSVPHGIANEDI VSQ NPGELSCRGDVLVMLKQTENNYLECQKGEDTGRVHLSQMKLIT PLDEHLRSRPNPFSPPKAPSHAQKPVDSGAPHAVVLHDFPAEQV |

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|------------|--|--|---|
| | | | DDLNLTSGEIVYLLEKIDTDWYRGNCNRNQIGIFPANYVKVIIDI PEGGNGKRECVCSSHCVKGSRCVARFEYIGEQQDELSFSEGEIII LKEYVNEEWARGEVRGRTGIFPLNFVEPVEDYPTSGANVLSTKV PLKTKKEDSGSNSQVNSLPAEWCEALHSFTAETSDDLFSFRGDR I |
| 6783 | 3 | 1750 | SYHHHHAQQSAAASPNTLASQKTVTTTSMITTKTLPLVLKAATA TMPASVVGQRPTIAMVTAINSQAVALSTDVQNTFVNLOTSSKVT GPGAEAVQIVAKNTVTLQVQATPPQPIKVPQFIPPPRLTPRPNF LPQVRPKPVAQNNIPIAPAPPPMLAAPQLIQRPVMLTKFTPTTL PTSQNSIHPVRVVGQTATIAKTFPMAQLTSIVIATPGTRLAGP QTVQLSKPSLEKQTVKSHETDEKQTESRTITPPAAPKPKREEN PQKLAFMVSGLVTHDHLLEEQSKRQERKRRTANPVYSGAVFE PERKKS AVTYLNTSMHFGTRKRGRPPKYNAVLGFGALTPTSPQS SHPDSENEKTETTTFTFPAPVQPVSLPSTSTDGDIHEDFCSVC RKSGQLLMCDTCSRVLHLDCLDPLKTIKPGMWICPRCQDQMLK KEEAI PWPGLT LAIVHSYIAYKAAKEEEKQLLKWSSDLKQEREQ LEQKVKQLSNSISKMEMKNTILARQKEMHSSLEKVKQLIRLIH GIDLSKPVDSSEATVGAISNGPDCTPPANAATSTPAPSPSSQSCT ANCNQGEETK |
| 6784 | 3 | 1750 | SYHHHHAQQSAAASPNTLASQKTVTTTSMITTKTLPLVLKAATA TMPASVVGQRPTIAMVTAINSQAVALSTDVQNTFVNLOTSSKVT GPGAEAVQIVAKNTVTLQVQATPPQPIKVPQFIPPPRLTPRPNF LPQVRPKPVAQNNIPIAPAPPPMLAAPQLIQRPVMLTKFTPTTL PTSQNSIHPVRVVGQTATIAKTFPMAQLTSIVIATPGTRLAGP QTVQLSKPSLEKQTVKSHETDEKQTESRTITPPAAPKPKREEN PQKLAFMVSGLVTHDHLLEEQSKRQERKRRTANPVYSGAVFE PERKKS AVTYLNTSMHFGTRKRGRPPKYNAVLGFGALTPTSPQS SHPDSENEKTETTTFTFPAPVQPVSLPSTSTDGDIHEDFCSVC RKSGQLLMCDTCSRVLHLDCLDPLKTIKPGMWICPRCQDQMLK KEEAI PWPGLT LAIVHSYIAYKAAKEEEKQLLKWSSDLKQEREQ LEQKVKQLSNSISKMEMKNTILARQKEMHSSLEKVKQLIRLIH GIDLSKPVDSSEATVGAISNGPDCTPPANAATSTPAPSPSSQSCT ANCNQGEETK |
| 6785 | 1 | 528 | LGNTVLHYCSMYSKPECLKLLLRSKPTVDIVNQAGETALDIKR LKATQCEDLLSQAKSGKFNPHVHVEYEWNLQRBEIDESDDDLDD KPSPVKKERSPRPQSFCSSSISPQDKLALPGFSTPRDKQRLSY GAFTNQIFVSTSTDSPTSPTTEAPPLPPRNAGKGTGPPITPHR |
| 6786 | 1820 | 1397 | RSPKVLVLAPTRELANHVSRDFKDI\TRKLTVARFYGGTSYQSQ INHIRNGIDILVGTGRIKDLHLSQGRDLKSLRHVVLDEVDQML DLGFAEQVEDIIHESYKTDSEDNPTLLFSATCPQWVYTV\KK YMKSRYEQVDLDGKMTQKAATTVEHLAIQCHWSQRPVIGDVLQ VYSGSEGRAIIFCETKKNVTAMMNHPIKQNAOCLHGDIAQSQR EITLKGFRGSSPKVLVATNVAARGLDIPEVDLVIQSSPPQDVES YIHRSGRTGRAGRTGICICFYQPRERQQLRYVEQKAGITFKRVG VPSTMDLVKSKSMDAIRSLASVSAAVDFFRPSAQRLEEKGA DALAAALAHISGASSFEPRSLITSDKGFVTMTLESLEEIQDVSC AWKELNRLKSSNAVSQITRMCLLKGNMGVCFDVPTTESERLQAE WHDSDWILSVPAKLPEIEEYDGNSTSSNRQSGWSSGRSGRSG RSGGRSGRSGRSGRSGRSGRSGRSGRSGRSGRSGRSGRSGRSG FD*VFYHLVDLSDFLVDSVYLTGRQIDHLTGLTGLIDHLTSHS SVWN |
| 6787 | 2646 | 2270 | PSSFPPKNVPLEELEPPK*KRSGLGSLTPKSIQNGP*PQTFFF FELGSPSGVISAHCNRLRLGSSDSPAPASRVAGIIGTCHHAWLI LVFLVBMGFHHVQGAGLKLTL\VIHFPWPVKVLGLQT |
| 6788 | 16 | 936 | GGTVDLR\DLAVSVLAAVRGG/ATVRRVRESNVLHEKSKGKT REGAEDKMTSGDVLNRRKMFYLLKTAFFSPQINTEHVD\ELDQ |

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|------------|--|--|--|
| | | | EVILWGS*DS*GYPK GK*LLPKKEVPSR/RVLLSGLTPLDATOE\FTEEDLSK\YVTTMVCVAVNGKPM LGV IHKPFSEYTAWAMVDGGS NVKARSSYNEKTPRIVVSRSHSGMVQVALQTFGNQTTIIPAGG AGYKVLALLDVPDKS QEKADLYIHVTYIKKWDICAGNAILKALG GHMTTSLSGEBISYTGSDGIEGGLLASIRMNHQALVRKLPDLEKT GHK |
| 6789 | 2 | 678 | GNGINVLKTIAPESA IKFMAYEQIKRLVW**PGDS*GF/YERLVA GSLAGAI AQSSIYPMEVLKTRMALRK TGQYSGMLDCARRILARE GVAAFYKGYVPNMLGIIIPYAGIDLAVYETLKNALQHYAVNSAD PGVFVLLACGTMSSTCGQLASYPLALVRTRMQAASIEGAPEVT MSSLFKHI LRTEGAFGLYRGLAPNFMKVIPAVSISYVVYENLKI TLGVQSR |
| 6790 | 2 | 4068 | APPAGRRRMOAAPRAGCGAALLLWTVSSCLCRAWTAPSTS QKCD EPLVSGLP HVAFSSSSSISGSPGYAKINKRGAGGWSFSDSD HYQWLQVDFGNRKQISALATQGRYSSSDWVTQYRMLYSDTGRNW KPYHQDGNIAFPGNINSDGVVRHELQHP IARYVRI VPLDWN EGRIGLR IEVYGC SYWADVINFDGHVVL PYRFRNKKMKTLKDVI ALNFKTSESEGVILHGEQQQDYITL ELKKAKLVLSLNLGSNQL GPIYGHTSVMTGSLDDHHWHSVVIERQGRSINLTDRSMQHFR TNGEFDYLDLDYEITFGGIPFSGKPSSSSRKVFKGCMESINYNG VNITDLARRKKLEPSNVGNLSFSCVEPYTPVPFFNATSYLEVPG RLNQDLFSVSFQFR TWPNGLLVFSHFADNLGNVEIDL TESKVG VHINITQT KMSQIDISSGSGLNDGQWHEVRFLAKENFAITIDG DEASAVRTNSPLQVKTGEKYFFGGFLNQMNSSSHSVLQPSFQGC MQLIQVDDQLVNL YEVAQRKPGSFANVSIDMCAIIDRCVPNHCE HGGKCSQTWDSFKCTCDETCYSGATCHNSIYEPSCEAYKHLGQT SNYYWIDPDGSGPLPLKVCNMTE DKVTI VSHDLQM QTPVVG YNPEKYSVTQLVYSASMDQISAITDSA EYCEQYVS YFCMKSRL NTPDGSFYTWVVGKANEKHYWGGSGPGIQKACGIERNCTDPK YYCNC DADYKQWRKDAGFLSYKDHLPSQVVGDTDRQGS EAKL SVGPLRCQGRNYWNAASFNPSSYLHFSFTQGETSADISPYFK TLTPWGVFLENMGKEDFIKLELKSATEVSFSFDVGNPVEIVVR SPTPLMDDQWHRVTAERNVQASLQVDRLPQOIRKAPTEGHTRL ELYSQLFVGAGGQQGFLGCIRSLRMNGVTLDLERAKVTS GFI SGCSGHCTSYGTNCENGKCLERYHGYSCDCSNTAYDGTFCNKD VGAFPEEGMWLRYNFQAPATNARDSSSRVDNAPDQQNSHPDLAQ EEIRFSFSTTKAPCILLYISSFTTDFLAVLVKPTGSLQIRYNLG GTREPYNIDVDHRNMANGQPHSVNITRHEKTI FLKLDHYPSVSY HLPSSSDTLFNSPKSLFLGKV IETGKIDQBIHKYNTPGFTGCLS RVQFNQIAPLKAALRQTNASAHVHIQGELVESNCGASPLTLSPM SSATDPWHL DHDLSASADFPYNPGQQAIRNGVNRRNSAIIGGVI A\VVIFTPSLCTP\ VLP*SR*HVS PHKGTLP IPNEAKGAGSRQK KPGRRPSMNDPPTSQRPIDESKKEWPHLRGGYLAMG |
| 6791 | 1801 | 1193 | TGHEGAKGEKGD KDLGPRGERGQHGPKEKGYPGIPPEL/PGW SAVV*SWLTAASTKVQA ILLPQPLE*LGLQIAFMASLATHFSNQ NSGII FSSVETNIGNFDFVMTGRFGAPVSGVYFFTFSMMKHEDV EEVYVYLMHNGNTVFSMYSYEMKGS DTSNHA VLKLAGDEWV LRMNGALHGDHQRPFSTFAGFLLFETK |
| 6792 | 33 | 1073 | VRHTNWGVDMYLFSLGSESPKGAIGHIVSTEXTILAVERNKVLL PPLWNRFTSWGFDDFSCCLGSYSGDKVLMTFENLA WGRCLCAV CPSPTTIVTSGTSTVVCWELSMTEGRPRGLRLRQALYGH TOAV TCLAASVT FSLVSGSQDCTCILWDLHLTHVTRLP AHREGISA ITISDVSGTIVSCAGAHLSLWNVNGQPLASITTAWGPEGAITCC CLMEGPAWDTSQIIITGSDGMVRVWKT/VGCEDEVCSWTASRRG APGSASKPKRPQVGEEPGLESRAGR*HCFDREAQQNQ P\ PVTAL AVSRNHTKLVGDERGRIFCWSADG*BERGSRGSGTTPVG |

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|------------|--|--|--|
| 6793 | 2340 | 805 | GRKEANY\YGS LTQAGTVSLGLDAEGQEVFPFSAVLPMVAPND LVFDGWDISSLNLAEMRRRAKVLWDGLQEQLWPHMEALRPSPV YIPEFTAAQNSARADNLIPGSRAQQLEQIRRDIDFRSSAGLDK VIVLWTANTERFCEVIPGLNDTAENLLRTIELGLEVSPSTLFAV ASILEGCAFLNGSPQNTLVPGALELAWQHRVFGGDDFKSGQTK VKSVLVDFLIGSGLKTMISIVSYNHLGNNDGENLSAPLQFRSKEV SKSNVVDMMVQSNFVLYTPGEEPDHCVVIKVVPYVGD SKRALDE YTS ELM LGGTNTLV LHNTCEDSLLAAPIMLDLALLTELQQRVSI CTMDPEPQTFHFVLSLSLFLFKAPLVPPGSPVVALFRQRCSCI ENILRACVGLPPQNHMLLEHKMERPGPSLKRVPVAATYPMLNK KGPVPAATNGCTGDANGHLQEEPPMPTT*GPGHTVSRLEFLPAAP HDPTLKAPTNGKGRCHFSPPSTWGSWGL |
| 6794 | 169 | 1349 | DDVKKRKEASAH*EKPGPPSRPGVRGGRERAGGRSGHARS CR\ EPAPPAPAPPEDHPDEEMGFTIDIKSFLKPGKTYTQRCRLFGV NLPTDITEEDFKRLFER YGEPSEVF INDRDGFGRIRLESRTLA E IAKAELDGTILKSRPLRIRFATHGAALTIVKNLSPVVSNELEQA FSQFGPVEKAVVVDDRGRATGKGFVEFAAKPPARKALERC GDG AFLLTTPRPVIVEPMEQFDEEDGLPEKLMQKTQQYHKEREQPP RFAQPGTFEFYASRWKALDEMEKQREQVDNRNIREAKEKLEAE MEAAARHEHQLMLMRQDLMRQEELRLREELRNQELQKRKQIQLR HEEHRRRESEMIHRHQEEELRRQEGFKNYMENYVCHFLR |
| 6795 | 1740 | 1010 | GPRRQTQVRDIIHEDSF*DWAAQETDCAQNSGERL*KGV/LENFS TMSKSAVKISLDLLSNPLCEQDQDILLNMVLTALDTAMKRM DAFNQ EKVNQIQKTVIEPLKKFGSVFPSLNMVAVKRREQUALQDYRLQAK VEKYEEKEKTGPVLAKLHQAREELRPVREDFEAKNRQLEEMPR FYGSRLDYFQPSFESLIRAQVYYSEMHKIFGDLSHQLDQPGHS DEQREERENEAKLSELRLALSTVADD |
| 6796 | 48 | 683 | GKEIQIPTIKLAWLLFGL*PVGALGKGVVSF**SHVALGQLGW LTRAVRSSWRWELCVSAQEVVSQRSA*SSPSPVGACPSLNPPET SVQEGRDWCQR*LPLRFSA LVGQPGCWPGGAPPERCV*PGRCKW HLQSQVLR*ERRRCCRLPRFA*GWRRRHQRLGLGIHPAPLGST SPPHPEGNSQQCRR*GWAAELRLPSSVVL*GKLG* |
| 6797 | 1620 | 211 | TERMTPSQPTRGSSCTRFSSMLWTSTWRCCTCHWAGMRMSVVG V TLGPMAQCLLSASGTTTEATWTRPTHTLIRWLLTASRVDP ERPPPPPSDDLTLLESSSYKNL/DAQIPQ/DWSMSPSTSG*RP LTSRASSIMRSRTAIPAS*SRLITKHTVGGSPSAWRPRPTSR S VSTPVSSSTETTASGSCLTWSSSPAPCPSSSAPAHSFASCK TSLWGC GGGSGDGSSACGSGWNLSMAGTSCSSPAMCSPSRAPS* RSASRPRTWRATTSAASSWAPRRWCWGA*SAT*PSSTTTISSS PHCGWPCPASCAAAWLSSTWATASVAGSCWGPIM*SSAHSFW CLSACSRSSMGTCL*RSPP\SGASRAAAWCGSSPSTFTPSS ASSSTWCSASSSRSPAPTTPSSIPAAQAQRASCRPTSHSART APPPASSAAGAARPAAFSAAEGTPRRSIRCW |
| 6798 | 3894 | 1696 | STISWESLESWLNKATNPSNRQEDWEYIIGFCDQINKELEG*VS ALWQLRGSLGRGTTMAKEGQPGSPRLSALECVLLVPQ/PQIA VRLLAHKIQSPQEWELQALTYLGDRVSEKVKTKVIELLYSWT M ALPEEAKIKDAYHMLKRGQIVQSDPPPIPVDRTLIPSPPPRPKN VFDDEEKSKLLAKLLKSKNPDDLQEAANKLIKSMVREDEARIQKV TKRLHTLEEVENNNVRLLEMLLHYSQEDSSDGDRELMKELFDQC ENKRRTLFKLASETEDNDNSLGDILQASDNLSRVINSYKTIIEG QVINGEVATLTLPDSEGNQCSNQGTLDLAE LDTTNSLSSVLA PAPTTPSSGIPILPFPQASGPPRSRSSSQAEATLGPSTSNAL SWLDEELLCLGLADPAPNVPPKESAGNSQWHLQREQSDLDFFS PRPGTAACGASDAPLLQPSAPSSSSSQAPLPPFPAPVVPASVP APSAGSSSLFSTGVAPALAPKVEPAVPGHHGLALGNSALHLDAL DQLEEAKVTSGLVKPTTSPLIPTTTTARPLLPFSTGPGSFLQ |

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|------------|--|--|--|
| | | | PLSFQSQGSPFKGPELSLASHVPLESIKPSALPVTAYDKNGF RILFHFAKECPGPRPDVLLVVVSMNLTAPLPVKSIVLQAAVPS MKVKLQPPSGTELSPPSPFIQPPAAITQVMLLANPLKEKVLRYK LTFALGEQLSTEVGEVDQFPPEQWGNL |
| 6799 | 3894 | 1696 | STISWESLESWLNKATNPSNRQEDWEYIIIGFCQDINKLEG*VS ALWGQLRGSGGLGRGTTMAKEGQPGSPRLSALECVLLVPQ\QIA VRLLAHKIQSPQEWELQALTYLGRVSEKVKTKVIELLYSWTM ALPEEAKIKDAYHMLKRGIVQSDPPIPVDRTLIPSPPRKPNP VFDDEEKSLLAKLLKSKNPDDLQEAANKLIKSMVREDEARIQKV TKRLHTLEEVENNVRLSEMLLHYSQEDSSDGDRELMKELFDQC ENKRRTLFKLASETEDNDNSLGDILQASDNLRSRVINSYKTIIEG QVINGEVATLTLPDSECNQCSNQGTLIDLAELDTTNSLSSVLA PAPTTPSSGIPILPPPQASGPPRSRSSSQAEATIGPSSTSNAL SWLDEELLCLGLADAPNPVPPKESAGNSQWHLQREQSDLDFFS PRPGTAACGASDAPLLQPSAPSSSSSQAPLPPFPVVPASVP APSAGSSLFSTGVAPALAPKVEPAVPGHGLALGNSALHHLDAL DOLLEEAQVTSGLVKPTTSPLIPTTPARPLLPFSTGPGSPLFQ PLSFQSQGSPFKGPELSLASHVPLESIKPSALPVTAYDKNGF RILFHFAKECPGPRPDVLLVVVSMNLTAPLPVKSIVLQAAVPS MKVKLQPPSGTELSPPSPFIQPPAAITQVMLLANPLKEKVLRYK LTFALGEQLSTEVGEVDQFPPEQWGNL |
| 6800 | 404 | 1646 | RRSPSTGLSPVPQSPSSPSLSDYSIPWSLLSGTIAWATPGK*AG *PQAW*LGLAPAIIFI/GLTRGRKQNKKEMAEGSGDVEDDAGDC SGARYNDWSDDDSDNESKSIWYPPWARIGTEAGTRARARARA RATRARRAVQKRASPNSDTDLSPQELQKVLCLVEMSEKPYILE AALIALGNNAAYAFNRDIIRDLGGLPIVAKILNTRDPIVKEKAL IVLNNLSVNAENQRLKVMNQVCDTITSLNNSVQLAGLRL TNMTVTNEYQHMLANSISDFRFLFSAGNEETKLQVLKLLNLAE NPAMTRELLRAQVPSSLG\SLFNKKENKEVILKLLVIFENIND FKWEENEPTQNOFGEGLFFFLKEFQVCADKVLGIESHHDFLVK VKVGKFMALAEHMFPPKSQE |
| 6801 | 2 | 1755 | SAEEFESQASVTMHDVDAESFEVLVDYCYTGRVLSLEANVERL YAASDMLQLEYVREACASFLARRLDLTNCTAILKFADAFGHRKL RSQAQSYIAQNFQQLSHMGSIREETLADTLAQLLAVLRDLSLD VESEQTVCHVAVQWLEAAPKERGPSAAEVFKCVRWMHFTEDQD YLEGLLTKEPIVKKYCLDVIEGALQMRYGDLKYSLVPVNSSSS /R*QQQLSCICSRKSTPETGYVCQGDGDLWTQPSLS\RYDPY SGDIYTMPSPLTSTFAHTKTVTSSAVCVSPDHDYLAAPRKLW VYKPAQNSWQQLADRLLCREGMDVAYLNGYIYILGGRDPIITGVK LKEVECYSVQRNQWALVAPVPHSFYSFELIVQNYLYAVNSKRM LCYDPSHNMWLNCSLKRSDFOEACVFENDEIYICIDIPVMKVYN PARGEWRRISNIPLDSETHNYQIVNHDQKLLITSTTPQWKNR VTVYBYDTREDQWINIGTMLGLLQFDSGFI CLCARVYPSCLEPG QSFITEEDDARSESSTEWDLGDFSELDSSESGSSSSFSDEWVWQ VAPORNAQDQGGSL |
| 6802 | 157 | 1341 | ETFPFLFFLLSKTPGKTASMAHFVQGTSRMIAAESSTEHEKCAE PSTRKNLMNSLEQKIRCLEKQKELLEVNQQWDQQFRSMKELYE RKVAELKTKLDAERFLSTREKDPHQQRKQKDDRRQEDDRQDLT RDRLOREEKEKERLNEELHELKEENKLLKGNLANKEKEHEYC EIKRLNKALQDALNICKSFSSECLKRSRVEFCHEEMRTEMEVLK QVQIYEEDEFKERSDRERLNOEKEELQINETSQSQNLNRLNSQ IKACQMEKEKLEKQLKMYCPCPCGLVFHLQDPWVPTGPGAVQ KQREHPPDYQWYALDQLPPDVQHKAN/DWCLAPPPVCCQAG/PR TPGLK*SSCLWLPKC*NFRFILSKESPSVEVHTNRERQQATRER G |
| 6803 | 1 | 2203 | KLSGRPYRHMVGLTSTKLYDIRKTIFTFTPOFIDQQQFYALDND |

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|------------|--|--|---|
| | | | KMIVEMLRDLSYLCRWRMTGQPTITTFPISHSMLEDEGTSLNS SILAALRKMQDGYFGGARVQTGKLEFLTTSCTHLSFMDPGPE GKLYSEDDYDDNYDYLESGNWMNDYDSTSHARCDEVARVLDHLL AHTAPHPKLAPTSQKGGDRFQAQVQTTCDLMSLVTKAKELHVQ NVHMYLPTKLFQASRPSFNLLDSPHPRQENQVPSVRVEIHLPDR QSGEVDFKALVQLKETSSSQEQADILYMLYTMKGPDWNTLYN ERSATVRELLTELYGKVGIRHWGLIRYISGILRKKVEALDEAC TDLLSHQKHLTVGLPPEPREKTIAPLPYEALTQLIDEASBGDM SISILTQEIIMVYLAMYMRTPQGLFAEMFRLRIGLIIQVMAELA HSLRCSAEATEGLMNLSPSAMKNLLHHILSGKEFGVERK/SVR PTDSNVSPAISIEHIGAVGATKTERTGIMQLKSEIKQVEFRRLS ISAESQSPGTSMTSPSSGSPFSAIDQSSSKDSRQSQWRRRLDQ ALNRVPVGFYQKVKVQLQKCHGLSVEGFVLPSTTREMTPEIK FSVHVES\VLNVLLRPEYRQLLVEAILVLTMLADIEIHSIGSII AVEKIVHIANDLFLQEQKTLGP\DDITMLAKDPASG\ICTLR\YD SAPSGRFGTMTYLS\RAA\ATYVQEFLE\HSICAMQ |
| 6804 | 1 | 951 | GSFGKKEEKAKNKEISLCMENSSNSSSSDEDEETKAKMTPTKKYN GLEEKRSKLRITGTFYSGFSEVAEKRIKLNNNDERLQNSRAKDR KDVWSSIQQWPKKTLKELFSDSDTEAASPPHAPAEGBVAEES LQTVABEESCSPPSVELEKPPPVNVDSKPIEEKTVEVNDRAEFP SSGSNFSAA*IPLPYLHLNRLHQS*QKGSROQSSVTSEPLAPN QEEVRSIKSETDSTIEVDSVAGELQDLQSERE*LASRF*QCCEL KQ**SARTRTS*KSLYRSEKSEKSGRRKFIKKAEEKP*SNSGK QQKEGKRHK |
| 6805 | 1539 | 206 | RQPDLYKPGKSFVSVSESSSLSNLDLPKFADGIKARNRNQNYL VPSPVLRIIDHTAFSTEKSADIVICDEECDSPEVNVQQTQEBSP IEVHTAEDVP IAEVHAI SEDVDIETENNSSSESLQDQDEEPPA KLCKILDKSQALNVTAQKWP LLRANSSGLYKCELFENSKYFS DLKQHMILKHKRTDSNVCRCVESFSTNMLLIEHAKLHEEDPYI CKYCDYKTVIFENLSQHIADTHFS DHLYWCEQCDVQFSSSELY LHFQHSCEDEQYLCQFCEHETNDPEDLHSHVNEHACKLIELSD KYNNGEHGQYSLLSKITFDKCKNFFVCQVCFRSLHTNVNRHV ALEHTKIPPHVCDDCGKFSSMLE\IAKHLNSHLSEGIYLCQYW EYSTGQIEDLKIHLDFKHSADLPKHCSDCLMRFGNERELISHLP VHETT |
| 6806 | 272 | 3794 | VALCFPNSDFVMFMDAFYGCLLAELGPVPIEVPLTRKDAGSQQV GFLGSGGVFLALTDDACQKGLPKAQTGEEVAAFQGWPPLSWLVI DGKHLAKPKDWHPLAQDTGTGTAYIEYKTSKEGSTVGTVSHA SLLAQCRALTQACGYSEATLTNVLDFKRDAGLWHGVLTSMVNR MHVVSVPYALMKANPLSWIQKVC FYKARAALVKS RDMHWSLLAQ RGQRDVSLSLRMLIVADGANPWSISSCDAFLNVFQSRGLRPEV ICPCASSPEALTVAIRFPD LGGPPPRKAVLSMNGLSYGVIRVD TEEKL SVLTQDVGVQVMFGANVCVVKLEGTPLYLCKTDEVGEICV SSSATGTAYYGLLGITKNVFEAVPVTTGGAPIFDRPFTRTGLLG FIGPDHLVFI VGKLDGLMVTGVRHNDVATALAVEPMKFVY RGRIVAFSVTVLHDDRIVLVAEQRPDASEEDSFQWMSRVLQAD SIHQGVGYCLALVPANTLPKAPLGGIHISETKQRFLEGTLPNC VLMCPHTCVTNLPKPRQKQPEVGPASMI VGNLVAGKRIAQASGR ELAHLESDQARKFLFLADVLQWRAHTTPDHPLFLLNNAKGTVT STATCVQLHKRAERVAALMEKGRLSVGDHVALVYPPGVDLIAA FYGLCYGCVPTVVRPFPQNLGTTLPVIMIVEVSKSACVLT QAVTRLLRSKEAAAADIRTWPTILD TDDIPKKIASVFRPPSP DVLAYLDFSSTTGILAGVKMSHAATSALCRSIKLQCELYPSRQ IAICLDPYCGLFALWCLCSVYSGHQSVLVPPLELESNVSLWLS AVSQYKARVTFCCYSVMEMCTKGLGAQTGVLRMKGVNLS CVRTC MVVAEERE\RIALTQSF SKLFKDLGLPARAVSTTFGCRVNVVIC |

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|------------|--|--|--|
| | | | LQGTAGPDPTTVYVDMRALRHDRVRLVERGSPHSLPLMESGKIL PGVKVIIAHTETKGLGDSHLGEI WVSSPHNATGYITVYGEAL HADHFSARLSFGDTQTIWARTGYLGFLRRTLTASGRHDALY VVGSIDETLELRGMRYHPIDIETSVIRAHRSIAECAVFTWTNLL VVVVELDGLQDALDLVALVTNVVLEEHYLVVGVVVIVDPGVIP INSRGEKQRMHLRDGFLADQLDPIYVAYNM |
| 6807 | 1444 | 606 | VGHDTVHAMFTCFPKCLGFSPPVNVTVSPRSESHTTTVSGGNG SVFOAGPQLQALANLEARRGSIGAAALSSRDVSGLPVYAQSGEPR RLTAQVAAPFGENALEHSSDQDTWDSLRSPGFCPLSSGGGAE SLPPGGPGHAEAGHLGKVCDFHLNHQQPSPTSVLPTEVAAPPLE KILSVDSVAVDCAVRTVPKPGPQPGPHGSLLEGCRLSLSGDLN RFP CGMEVHSGQRELESVVAVGEAMA\LKFPMGAMSYCLDRSR FLRLPMGLSCPLQVQ |
| 6808 | 2063 | 737 | GVGSGAASALARSRLASRLSSRRRTAPRSGAMQRLAMDRLML SRELSLYLEHQVRVGFSGVGLSLILGFSVAYAFYLLSSIAKK PQLVTGGESFSRFLQDHCPVVTETYYPTVWCWEGRGQTLRLPF\ ITS KPPVQYRNELIKTADGGQISLDWFDNDNSTCYMDASTRTI LLLPGLTGTSKESYILHMIHLSEELGYRCVFPNNRGVAGENLLT PRTYCCANTEDLETVIHHVHSLYPSAPFLAAGVSMGMLLLNYL GKIGSKTPLMAAATFSVGWNTFACSESELEKPLNWLLFNYYLTTC LQSSVNHKRMFVKQVDMDHVMKAKSIREFDKRF TSVMFYQTI DDYYTDASPSRLKSVGIPVLCNLSVDDVFSHPALPIETAKQN PNVALVLTSYGGHIGFLEGIWPRQSTYMDRVFKQFVQAMVEHGH ELS |
| 6809 | 939 | 65 | DYSGQTPVPTEHGMTLYTPAQTHPEQPGSEASTQPIAGTQTVPQ TDEAAQTD SQPLHPSDPTKQKPKRLHVSNI PFRFRDPLRQMF GQFGKILDVEIIFNERGSKGFGFVT FETSSDADRAREKNGTIV EGRKIEVN NATARVMTNKKTGPNY TNGWKLNPVVGAVYGPEFYA VTGFPPYPTGTAVAYRGAHLRGRGRAVYNTFRAAPPPPIPTYG AVVYQDGFYGAEI\LEATQPTD TLSPLQRRQPTATVTAESTQLP TRTITPSGPRRPTALEPCETFFHRLG |
| 6810 | 939 | 65 | DYSGQTPVPTEHGMTLYTPAQTHPEQPGSEASTQPIAGTQTVPQ TDEAAQTD SQPLHPSDPTKQKPKRLHVSNI PFRFRDPLRQMF GQFGKILDVEIIFNERGSKGFGFVT FETSSDADRAREKNGTIV EGRKIEVN NATARVMTNKKTGPNY TNGWKLNPVVGAVYGPEFYA VTGFPPYPTGTAVAYRGAHLRGRGRAVYNTFRAAPPPPIPTYG AVVYQDGFYGAEI\LEATQPTD TLSPLQRRQPTATVTAESTQLP TRTITPSGPRRPTALEPCETFFHRLG |
| 6811 | 1522 | 658 | DLVTWVSFVDCRVIASTHGH\KSWVSUVAFDPYTSVEEGDPME FSGSDEDFQDLLHFGDRADSTQCRLSRNSTDSRPVSVTYRFG SVGQDTQLCLWDLTBDILFPHQPLSRARHTNVMNATSPAGSN GNSVTPGNSVPPPLFRSNSLPHSAVSNAGSKSSVMDGAIASGV SKFATLSLHDKRERHHEKDHKRNHSMGHISSKSSDKLNLVTCTK TDEAKTLGTPLCPRMEDVPLLEPLICKKIAHERLTVLIFLEDICI VTACQEGFICTWGRPGKVVSFNP |
| 6812 | 4001 | 1682 | EDAVFSLDLSTTIQGTWFLNGEELKSNEPEGQVFEALRYRIEQ KGLQHRILHAVKHQDSGALVGFSCPGVQDSAAITIQESPVHIL SPQDKVSLTFTTSERVVLTCELSRVDFPATWYKDGQKVESELL VVKMDGRKHRLILPEAKVQDSGEFECRTEGVSAFFGVTVQDPPV HIVDPREHVFVHAITSECVMACEV\DR\EDAPVRWYKDGQVEVE ESDFVLENEGPHRRLLVPATQPSDGGEFQCVAGDECAYFTVTI TDVSSWIVYPSGKVYVAARLERVVLTCELCRPWAEVRWTKDGE EVVESPALLLQKEDTVRRLVLPVQLED SG EYLCEIDDESASF TTVTEPPVRIIYPRDEVTLIAVTLECVVLMCELSREDAPVRWYK DGLEVEESEALVLERDGPRLVLPAAQPEDGGEPVCDAGDDSA FFTVTVTEPPVQFLAETTPSPLCVAPGEPVVLSCELSRAGAPV |

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|------------|--|--|--|
| | | | VWSHNGRPVQEGEGLELHAEGRPRVLCIQAGPAHAGLYTCQSG AAPGAPSLSTFTVQVAEPPVRVVAPEAAQTRVRSTPGGDLVLVH LSGPGGPVVRWYKDGRLASQGRVQLEQAGARQVLRVQGARSGDA GEYLCDAPQDSRIFLVSVEEPLLVKLVSDLTPLTVHEGDDATFR CEVSPPDADVTLWRNGAVVTPGQQRQSCCSYGGCRMCGQRKART CVSKWRQAEWVQRGFCAGCEVGSFCPTTLACPWPRMGTSTASSS MVSYNPTRAAPTAAATTIAPWPFGSA |
| 6813 | 9 | 836 | SSTQQRPGVFAGPRELDGYLGVDHKLPLMKHCRDCALVTSSGHL LHSRQGSQIDQTECVIRMDAPTRGYGRDVGNRSTSLRVIAHSSI QRILNRHDLNLSVQGTVFIFWGPSSYMRRDGKQVYNNLHLLS QVLPRLKAFMITRHKMLQFDELFKQETGQ\NRKISNTWLSTGWF TMTIALELCDRINVYGMGPPDFCRDPNHPSVPYHYEPPGPDCEC TMYLSHERGRKGGSHHRFITEKRVFKNWARTFNIHFFQPDWKPS LAINHPENKPVF |
| 6814 | 3 | 737 | KFRREQAN/ARERNRMHGLNDALDNLKRVVPCYSKTQKLSKIET LRLAKNYIWLSEILRIGKRPDLLTFVQNLCKGLSQPTTNLVAG CLQLNARSFLMGQGGEEAAHTRSPYSTFYPPYHSPELTTPPGHG TLDNSKSMKPYNYCSAYESFYESTSPCEASQFEGPLSPPPINYN NGIFSLKQETLDYKKNYNYGMHYCAVPPRGPLGGAMFRLPTD SHFPYDLHLSRQSLTMQDELNAVPHN |
| 6815 | 906 | 553 | QGLDPASQTKVVELLKDGSRRGRDRSSRDMMAGGAGPRSESDLE DVGPTAEWNGDGGSGSLRRSGSFGKLRDALRRSSEMLVKKLQGGT PQEPNPNRMKRASSLNLNFKSVSEETPQPGG |
| 6816 | 1 | 803 | NLLKTHKPLLGQDEDSLHSEVFAQMGNYQBYLKTLASPLREID PDQPKRLHTFGNPFQDKKGMIDEADEFVAGPQNKVKRPGEPN SPMSSKRRRSMSSLLLRKPQTPTVTNHVGGKGPASWFPSPYN LIKPTLVHTDATIIHDGHEEKMEGQITPDGFLSKSAPSELINM TGDLMPPNQVDSLDDFTSLSKDGLIQKPGSNAFVGGAKNCSLV VDDQKDPVASTLGAMPTLQITPAMAQGINADIKHQLMKEVRKF GRSK |
| 6817 | 172 | 3457 | LGMMDSPKIGNGLPVGPGTDIGISSLHMVGYLGNFDSAKVPS DEYCPACKEKGLKALKTYRISFQESIFLCEDLQCIYPLGSKSL NNLISPDLEBCHTPHKPQKRKSLESSYKDSLLANSKTRNYIA IDGGKVLNSKHNGEVYDETSSNLPDSSGQONPIRTADSLERNEY LEADTVDMATTKDPATVDVSGTGRPSQNEGCTSKLEMPLESKC TSFPQALCVQWKNAYALCWLDCILSALVHSEELKNTVTGLCSKE ESIFWRLLTKYNQANTLLYTSQLSGVKDGCKKLTSFIFABIET CLNEVRDEIFISLQPOLRCTLGDMESPVFAPLLKLETHIEKL FLYSFSWDFECSQCGHQYQNRHMKSLVTFTNVIPEWHPLNAAHF GPCNNCNSKSQIRKMVLEKVSPIFMLHFVEGLPQNDLQHYAFHF EGCLYQITSVIQYRANHFIWILDADGSWLECDLKGPCSERH KKFVFPASEIHIWIERKISQVTDKEAACPLKKTNDQHALSNE KPVSLTSCSVGDAASAEASVTHPKDISVAPRTLSQDTAVTHGD HLLSGPKGLVDNIIPLTLEETIQKTASVSQNLSEAF\LENKPV AENTGILKTNLLSQESLMASSVSAPCNEKLIQDQFVDISFP SQ VVNTNMQS VQLNTEDTVNTKSVNNTDATGLIQGVKSVEIEKDAQ LKQFLTPTKTEQLKPERVTSQVSNLKKKETTADSQTTSKSLQNG SLKENQKKPFVGSWVWGLISRGASFMPCLCVSAHNRNTITDLQPS VGVNNFGGFKTKGINQKASHVSKKARKSASKPPPI SKPPAGPP SSGTAAPHAAHASEVLEKSGSTSCGAQLNHSSYNGNGISSANH EDLVEGQIHKLRLKRLKLAEKKLAALMSSPQSRSTVRSENLE QVPDQGSNDCESEDLLNELPYPIDIANESACTVPGVSLYSS QTHEBILAELLSPTPVSTELSENGEGDFRYLGMGDHSHIPPPVPS EFNVDVSNTHLRQDHNVCSPTKNPKCEVQPDSLTNACVRLTNL ESPMKTDIEDEFFSSALNALANDTLDLPHEDEYLFENY |
| 6818 | 2 | 240 | RGFDKVLWT/LSGAVK\CVQFSRISPDGEEGYPGELKVWVTTYTL |

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|------------|--|--|--|
| 6819 | 1 | 961 | DGGE/LHS/ATTEHKP/VQATPVNLT\TILTSTWQARLPQI GIPCTEMGNFDNANVTGETIEFAIHYCFKTHSLEICIKACKNLAY GEEKKKCNPNVVKTYLLPDRSSQGRKKTGVQRNTVDPTFQETLK YQVAPQALVTRQLQVSVWHLGTLARRVFLGEVLIPLATWDFEDS TTQSFWRHPLRAKADKYEDSVQSNGLTVRAKLVLPSRPRKLQ EAQEGTDQPSLHGQLCLVLGAKNLPVRPDGTLNSFVKGCLTLP DQQLRLKSPVLRKQACQWKHSFVFSGVTPAQLRQSSLELTVM DQALFGMNDRLGGT\RLGSKGDTAVGGDACQSQKLQWQKVLSS PNLWTDMTLVH |
| 6820 | 1014 | 340 | GDMVYIVGHVPPGFPEKTONKAWFREGFNEKYLKVVRRKHHRVIA GQFFGHHHTDSFRMLYDDAGVPIAMFITPGVTPWKTTLPGVNV GANNPAIRVFEYDRATLSLKMVTYFMNLSQANAQGTPRWELEY QLTEAYGVPDASAHSMHTVLDRIAGDQSTLQRYVYVNSVYSAG VCDEACSMQHVCMARQVDIDAYTTCLYASGTPVPQLPLLMAL LGLCT |
| 6821 | 1088 | 518 | EFDIYR/EVGGEFVPVTRDDSSNGFPRTQHGPSPTVHPIQSPQN RFCVLTLDPETLPAIATTLIDVLFYSHSTPKEAASSSSPESSIT FFAFSLIEGYI\SIUMDAETQKKFPSDLLLTSSSGELWRMVRIG GQPLGFDECGIVAQIAGPLAAADISAYYISTFNFHDHALVPEDGI GSVIEVLQRRQEGLAS |
| 6822 | 1088 | 518 | EFDIYR/EVGGEFVPVTRDDSSNGFPRTQHGPSPTVHPIQSPQN RFCVLTLDPETLPAIATTLIDVLFYSHSTPKEAASSSSPESSIT FFAFSLIEGYI\SIUMDAETQKKFPSDLLLTSSSGELWRMVRIG GQPLGFDECGIVAQIAGPLAAADISAYYISTFNFHDHALVPEDGI GSVIEVLQRRQEGLAS |
| 6823 | 654 | 221 | PPKLLSRWARMGHGDEIV\LSDLNFPGLLHLPVVGFWRSVQTAC GIPQLLEAVLKLPLDITYVESPAVMELVPSDKERGLQTPVWTE YESILRRAGCVRALAKIERFEFYERAKKAFVAVTGETALYGNL ILRKGVLALNPLL |
| 6824 | 858 | 104 | LLLAQRWGWG\CCFFSLAVSVKMNVLLFAPGLLFLLLTQFGFRG ALPKLGICAGLQVVLGLPFLLENPSGYLSRFDLGRQFLFWHTV NWRFLPEALFLHRAFLALLTAHLTLLLLFALCRWHRTGESILS LLRDPKSRKVPQPLTPNQIVSTLFTSNFICFSRSLHYQFVV WYFHTLPYLLWAMPARWLTHLLRLVLGLIELSWNTYPTSTCSS AALHICHAVILLQLWLGPPFPKSTQHSKKAH |
| 6825 | 3 | 1173 | SSGEFLQASDIMWTISDTGWILITLCSLMEPWALGACTFVHLL PKFDPLVILKTLSSYPIKSMMGAPIVYRMLLQDDLSSYKFPHLQ NCLAGGESLLPETLENWRAQTGLDIREFYGTETGLTCMVSKTM KIKPGYMGTAASCYDVQIIDDKGNVLPGTGEGDIGIRVKPIRPI GIFSGYVDNPKTAANIRGDFWLLGDRGKDEDDGYFQFMGRADD IINSSGYRIGPSEVENALMEHPAVVETAVISSPDPVRGEVVKAF VILALQFLSHDPEQLTKELQQHVKSVTAPYKYPRKIEFVLNLPK TVTGKIQR\KLDRKEWKMSGKAPCAVRHLRDIHLDSPFLLSLSP PFGPLALEMDGYGDSLWEEHEYKFCALVISTKLYHVRC |
| 6826 | 2304 | 954 | LKTESFKPW/VNIALAFHLLGERASPNSFWQPYIQTLPREYDTP LYFEEDEVRYLQSTQAIHDVFSQYKNTARQYAFYKVIQTHPHA NKLPLKDSFTYEDYRWAVSSVMTRQNQIPTEDGSRVTALIPW DMCNHTNGLITTGYNLEDDRCCEVALQDFRAGEQIYIFYGTRSN AEFVIHSGFFDNNSHDRVKIKLGVSKSDRLYAMKAEVLARAGI PTSSVFALHFTPEPISAQLLAFRLVFCMTEELKEHLLGDSAI RIFTLGNSEFEVSWDNEVKLWTFLEDRASLLKTYKTTEEDKS VLKNHDSVRAKMAIKLRIGEKEILEKAVKSAAVNREYYRQME EKAPLPKYEESNLGLLESSVGDSRLPLVLRNLEEEAGVQDALNI REAIKAKATENGLVNGENSIPNGTRSENEINQESKRAVEDAK GSSSDSTAGVKE |

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|------------|--|--|--|
| 6827 | 1 | 779 | SSVVEFGLSVLGGFLFLFVLENMLGLLRHRLRPRCCRRKRRL ETRNLDPENGSGMALQPLQAAPEPGAQGGREKNSQHPPALAPPG HQGSHSHGQGGTDITWVLLGDLHNLTDGLAIGAAFSDFSSG LSTTLAVFCHLPHELGFAMLLQSGLSFRRLLLLSLVSGALGL GGAVALGVGLSLGPVPLTPWVFGVTAGVFLYVALVDMPLALFPSS GAPAYA\HVLLOGLGLLLGGLMLAITLLEERLLPVTTTEG |
| 6828 | 3 | 1654 | KSQHG/WILQMLHSCKEGYVKDLKGNPGLHRLAMDLDNGTRFSE LGHLSQTSALKRGSFQSGRDDTWRYKTPHRVAFVEKLTKLVL S QLPNFWKLWISYVNGSLFSETAEKSGQIERSKNVRQRONDFKKM IQEVMHSLVXLTRGALLPLSIRDGEAKQYGGWEVKCELSGQWL HAIQTIVRLTHESLTALEIPNDLLQTIQDLILDLRVRCVMATLQH TAEETKRLAEKEDWIVDNEGLTSLPCQFQCIVCSLQSLKGVLE CKPGEASVFPQPKTQEEVCQLSINIMQVFIYCLEQLSTKPDADI DTTHLSVDVSPDLFGSIHEDFSLTSEQRLLIVLSNCCYLERHT FLNIAEHFEXHNFQGIKTIQVSMASLKELDQRLFENYIELKAD PIVGSLFPGIYAGYFDWKDCLPPTGVRNLYKEALVNI IAVHA EV FTISKELVPRVLSKVIEAVSEELSRMLQCVCSSFSKNGALQARLE ICALRDTAVAYLTPEKSSSFQKQALEALPQLSSGADKKLLEELN KFKSMHLQLTCFQAASSTMMKT |
| 6829 | 1 | 782 | MRMEAGEAAPAGAGGAAAGGKGVRLNVGGTVLTTROTLCR EQKSLFSLRCLQGEELQSDRDETGAYLIDRDPYFGPIINFLRHG KLVLDKDMAEEGVLEAEFYNIQPLIRI IKDRMEEKDYTVTQVP PKHVYRVLQCEEELTQMVSTMSDGRWFQELVNIGSSYNGSED QAEFLCVVSKELHSTPNGLSSSESRKTKSTEEQLLEEQQQBEV BEVEVEQVQVEADAQEK/CCYKPEAPGCEAPDHLQGLGVPI |
| 6830 | 1 | 939 | MEPGSVENLSIVYRSRDFLVVNHWDVRIIDSKAWRETLTLQKQL RYRFPFELADPDTCYGRFCHQLDFSTSGALCVALNKAAGSAYR CFKERRVTKAYLALLRHHIQESRVTISHAIGRNSTEGRAHTMCI EGSQCENFKPSLTDLVLEHGLYAGDPVSKVLLKPLTGRTHQL RV\HCSALGHVPVVDLTGYEVSGREDRPFMMMLHAFYLRIPDT ECVEVCTPDPFLPSLDACWSPHTLLQSLDQLVQALRATPDPDPE DRGPRPGSFSALLPGPGRPPPPPTKPPETEAQRGPCLQWLSEWT LEPDS |
| 6831 | 3 | 1087 | SLFFGSSTPDNKVAEQEDLETPSPSVEKAVTVIDPEGTIPTNF NVAEKPADHSLSEVKLKTADPRGTLVKSGDQNVKEKSMILSN VEDLQPKFISEVSRDYGKKEISGDSEEMNINSVTSADGENL EIQSYSLIGELVMEEAKTIVPPHVTD SKRVQKPAIAPPSKWN I SIFKEEPRSDQKQKSLSDVDVVKVPQPKSASSNFASKNITKE SEKPESIILPVEESKGLIDFSEDRLKKEMQNPTSLKISEETK LRSVSPTEKKDNLENR\SYTL\AEKKVLAEKQNSV\APLELRDS NEIGKTQITLGSRSSTELKESKADAMPQH FYQNEYNERPKI IVG SEKEKDEKKK |
| 6832 | 1809 | 412 | MGSLISGPPQDNGEALKEPERAQEHS LNPAGGQHFPFYL LV VSLKKKRSDDYEPITTYQFPKRENLLRGQEEEEERLLKAIP LF CFPDGNWASLTETPRETFSFVLTNVDGSRKIGYCRLLPAGPG PRLPKVYCIISCIGCFGLFSKILDEVKRRHQISMAYIYPMQGL REAAFPAPGKTVTLKSPIDPSGTFEISLTRPLDSHLEHVD FSSL LHCLSFQILQIFASAVLERKII FLAEGLSLTSQCIHAAALY PFSWAHTYIPVVPESLLATVCCPTPFMVGVQMRFQQEVMDS PM E EVLLVNLCEGTFLMSVGDEKILPPLQDDILDLSLQGGINELKT AEQINEHVSGFPVQFFVKIVGHYASYIKREANGQGHFOERSFCK ALTSKTNRRFVKKFVKTLQFLSLFIQAEKSKNPAGYFQOKILE YBEQKKQ/TETKGNCEIRAVVNKND |
| 6833 | 1 | 1129 | PLMTLSQCGGIPGHGSHGCHGHGLPKGPRVKSTRPGSSDIN VAPGEQGPQDEERTNLVANTSNSGLKLDPADPENPRSGDTVEV QVNGNLVREPDMHELEDRAQQLNMRGVFLHVLGDALGSVIVVV |

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|------------|--|--|---|
| | | | NALVFFYSWKGCSGDFCVNPFDPCKAFVEIINSTHASVVEA GPCNVLYLDPTLCVVMVCILYTTYPILLKESALILLQTVPKQID IRNLIKELRNVEGVVEVHELHVWQLAGSRRIATAHIKCEDPTSY MEVAKTIKIDVFHNHGIHATTIQEPASVSGSKSSVVPCELACRTQ CALKQCCGTLPOAPSGKDAEKTPAVSIISCLENNLEKKPRRTK AENIPA\VVIEIKN\IPNK\QPESL |
| 6834 | 78 | 1151 | AGQERPAPIWRLWLPTPSVSRKAEPAHIPINR*GA*E*RGGLP LCGSSASAYGNH*RLTPWSPGGS*HM*SSKAPVTOAREVLVAGP CSKLVLSGARGIVGTTVQVLVEAQPPILLFTGVWGLNRAGEE SRAL*LIBEVTQVRDAHLGNAVVGCAQLSQGQVGSALAKALLE AAAARVDCKEVLTIVSGDKQAEVSVRL*VRDVCVEEAGCVEFGQ AHGRPGLALAKGRGGTNEVEEQVQVDGVQKLVSACHELHVAG QQDGEDQAARTRLQAGAHVAHGRRQQAQPCRPHEAGVSCHE LQQVVDAL*ARE*APQIIIVLLLEDVAQLRTGKKA*DLVVDVE QLRLQL |
| 6835 | 1 | 834 | GIPAAADR\EASLELIKLDYSRTFPNLCIFQGGPYHDMHLSILG AYTCYRPDVGIVQGMSEFAAVLILNLDTADAFIAPNLLNKPCQ MAFFRVDHGLMLTYFAAFVFFFEENLPKLPAHFKNLTPDIYL IDWIFTLYSKSLPLDLACRIWDVFCRDGEEFLFRTALGILKLFE DILT KMDFIHMAQFILTRLPEDLPAAELFASIIATIQMSRNNKWA QVLTALQKDSREMEGKSVPPTLRLQREFALGTNQSPMPRLCC FRLTPGQPRRTDAL |
| 6836 | 1 | 850 | MSCGRPPPPDVGMITLKV\DNLTyrTSPDSLRVFEKYGRVGDV YIPREPHTKAPRGFAFVRFHRRDAQDAEAAMDGAELDGRELRV QVARYGRRDLPRSRQGRRAAGPEAA/RYGRRSRSYGRRSRSPR RRHRSRSRGPSCSRSRSRSRYSRYSRSPYSRSPYSRYSRYSR PYSRYSRYSRYSRYSRYSRYSRYSRYSRYSRYSRYSRYSRYSR SRASSTSKSSARRSKSSSVSRSRSRSRSSMTSPPRVSKRKS KSRSRSKRPPKSPEEEGQMS |
| 6837 | 1 | 1369 | TDGAAVAGNPGSDYFFPGGTAP/GGPRTRRP\SGTSSSGSKASGP PNPFAQGGDTSLSPNYTLESTSGNDGKPVSGGGGRGRRRKRDS GHVSPGTFDFKYSAAPDSGGAPGVSPGQQASGAAGVSSAGET RGAPTPHEKALTSFSGWKGAEILLGDQPDIGSLDGGAKSDSS PNVGEFASDEVSTSYANEDEVSSSDNPQALVKASRSPLVGTGSP KLPPRGVGAEGHFKAPPPALGLGIMSNSTSTPDSYGGGGGPGH PGTPGLEQVVRTPTSSSGAPPDEIHPLEILQAQIQLRQQFSIS EDQPLGLKGGKKGECAVGASGAQNGDSELGSCCSEAVKSAMSTI DLDSLMAEHSAAWYMPADKALVDSADDDKTLAPWEKAKPQNPNS KEAHDLPANKASASQPGSHLQCLSVHCTDDVGDAKARASVPTWR SLHSDISNRFGTFAALT |
| 6838 | 16 | 499 | LTDTPPPKTHMIHHSISDYKATLRCWALGFYPMETLTWQDDEE DQTRDMELVETRPAGDGTQKWAAVVPSGEE/Q/RYMCHVQHE GLEPEPLTLRWEQSSQPTIPIVGIVAGLVLLGAVVTGAVVSAMC RKQNSDRVSYSEASSDHAQGSVDVSLTACKV |
| 6839 | 1 | 1195 | AAPAGGGPDPEALSAPFGRHLGLSWPQVVKRLDALLSEPIPIHG RGNFPPTLSVQPRQIRAGGPQHPGGAG\IHVHRVRLHGSAASHVL HPESGLGYKDLDLVFRMDLRSEASFQLTAVVLACLLDFLPAGV SRAKITPLTLKEAYVQKLVKVCCTDSRWLSLISLNSKSGKNVELK FVDSVRRQFEFSIDSFQIILDSLLLFQCCSTPMSEAFHPTVTG ESLYGDFTEALEHLRHRVIATRSPEEIRGGGLLKYCHLLVRGFR PRPSTDVRLQRYMCSRFFIDFPLVEQRRTLLERYLEAHFPGAD AARRYACLVTLHRVNESTVCLMNHERRQTLDLIAALALQALAE QGPATAALAWRPPGTDGVVPATVNYVYVTPVQPLLAHAYPTWLP CN |
| 6840 | 4254 | 2061 | ELQGDVSVDPVPSMAWCENSTCVGFKRDYLYLIRVDGKGSIKEL FPTGKQLEPLVAPLADGKAVAGQDDLTVVLEEGICTQRCALNW |

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|------------|--|--|--|
| | | | TDIPVAMEHQPPYITAVLPYVEIRTFEPRLVQSTIELQRPFI TSGGSNIIYVASNHFVWRLIPVPMATQIQQLQDKQFELALQLA EMKDDSDSEKQQQIHHIKNLYAFNLFCQKRFDESMQVFAKLGT PTHVMGLYPDLLPTDYRKQLQYPNPLPVLSGAELEKAHLALIDY LTQKRSQVLKLNDSHQSSSTPLMEGTPTIKSKKKLLQIIDTT LLKCYLHTNVALVAPLLRLNNHCHIEESEHVLKKAHKYSELI LYEKKGLHEKALQVLVDQSKKANSPLKGHERTVQYLQHLGTENL HLIFSYSVWVLRDFPEDGLKIFTEDLPEVESLPDRVLGFLIEN FKGLAIPYLEHIHVWEETGSRPHNCLIQLYCSKVQGLMKEYLL SFPAGKTPVPAGEEBEGELGEYRQKLLMFLEISSYDPGRLLICDF PFDGLLEERALLGRMGKHEQALFIYVHILKDTMAEEYCHKHY DRNKDGNKDVYLSLLRMYLSPPSIHCLGPIKLELLEFKANLQAA LQVLELHHSKLDTTKALNLLPANTQINDIRIFLEKVLEENAKK RFNVQLKNLLHAEFLRV\QEERILHQVVKCIITEKVKCMVCKKK IGNSAFARYPNGVHVHYFCS\KEVNPADT |
| 6841 | 1 | 3206 | TPSTTGKSNTPSTSSVPSAAVTPLNESLQPLGDYGVGSKNSKRA REKDRSRNMEVQVTQEMRNVSIGMGSSDEWSDVDIIDSPELD MCPETRLDRTGSSPTQGI VNKAPGINTDSLVELSTAGSEVIGD VDEGADLLGEFGMGKEVGNLLLENSQLLETKNALNVVKNDLIA KVDQLSGGEQVLRGELEAAKQAKVKLENRIKELEELKRVKSEA IIAREPKBEAEDVSSYLCTESDKIPMAQRRRFRVEMARVLM RNQYKERLMELQEA VRWTE MIRASREHPSVQEKKSTINQFFSR LFSSSSSPPAKRPYPGNIHYKSPTTAGFSQRRNHAMCPI SAG SRPLEFPDDDDCTSSARREQKREQYRQVREHVRNDGRLQACGW SLPAKYKQLSPNGGQEDTRMKNPVPVYCRPLVEKDPTMKLWCA AGVNLSGWRPNEDDAGNGVKPAPGRDPLTCDREGDGEPKSAHTS PEKKKAKELPEMDATSSRVWILTSTLTTSRVV I DANQPGTVVD QFTVCNAHVLCISSIPAASDSYPPGEMFLDSVDNPEDPGADGV LAGITLVGCATRCNVPRSNCSRGDTPVLDKGQGEVATIANGKV NPSQSTEATEATEVPDPGPSEPETATLRPGPLTEHVFTDPAPT PSSGPGQPGSENGPEPDSSTRPEPEPSGDPTGAGSSAAPT MWLG AQNGWLYVHSAVANWKKCLHSIKLKDVSLSLVHVKGRVLVALAD GTLAI FHRGEDGQWDL SNYHLMDLGHPHHSIRCMAVVDRVWCG YKNKVHVIQPKTMQIEKSFDAHPRESQVRQLAWIGDGVWVSTR LDSTRLYHAHTHQHLQDVIDEPYVSKMLGTGKLGFSFVRITAL LVAGSRLWVG TGNVVISIPLTETVVLHRGQ\LLG\LRANKTSP TSGEQ\ARPGG\IHVYG\DDSSDRAARSFIPYCSMAQAQLCFH GHRDAVKFFVSVPGNVLATLNGSVLDSPAEGGPAAPASEVEGQ KLRNVLVLSGGEGYIDFRIGDGEDDETEGAGDMSQVKFVLSKA ERSHIIWQVSYTPE |
| 6842 | 3 | 926 | RCQQLSATILTQVLERTPLCAILKQKAPQQYRIRAKLRSYKP RRLFQSVKLCPCKCHLLQEVPHGEDLDII FQDGATKTPDVKLQN TSLYDSKIWTTKNQKGRKVAHVFKNNGILPLSNECLLLIEGGT LSEICKLSNKFNSVIPVRSGHEDLELLDLSAPFLIQGTVHHYGC KQWST*RSIQNLNSLVDKTSWIPSSVAEALGIVPLQYVFVMTFT LDDGTGVLEAYLMDSDKFFQIPASEVLMDDDLQKSVDIMDMFC PPGIKIDAYPWLECFIKSYNVNTNGTDNQICYQIFDTTVAEDVI |
| 6843 | 2 | 851 | NHRKVLGAKRYECNECGKSFAYTSSLIKHRRIHTGERPYECSE CGRSFAENSSLIKHLRVHTGERPYECVECGKSFRSSSLLQHQ VHTRERPYECSECGKSFSLRSLNIHQVRHTGERHECGQCGKSF SRKSSLI IHLRVHTGERPYECSDCGKSFENSSLIKHLRVHTGE RPYECIDCGKSFRRSSSFRHQRVHTGMRPYK*SKFWKFSCPGF LLLQGRVHTGSRCECDKWGIFFS*NASFPT*KSAPTEEVVPE CNECEKAFSPLSLVTITFT |
| 6844 | 244 | 642 | EHQLAGFELRKTQTSMSLGTREKTRVKSTAYLSPOLEDVVFY QYDVKSEIYSFGIVLWEIATGDI PFQGCNSEKIRKLVAVKRQGE |

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|------------|--|--|---|
| | | | PLGEDCPSELREIIDECEAHDPSPVRPSVDEILKKLSTFSK*CIK I |
| 6845 | 3 | 1519 | VAVRDECYWRHVFWDDQLWMLLFILMCHPETARARLEYRIRTLG GALENAQNLYGQGAFAWESADSGLEVCPEDYGVQEVHVNGAV GLAFELYHTTQDLQLFREAGGWDVVRVAEFWCSRVEVSPREE KYHLRGVMSPDYHSGVNNVSYTNVLVQNSLRFAAALAQDLGLP IPSQWLAVADKIKVPFDVEQNPHPEFDGYEPGEVVKQADVVLG YVPFSLSPDVRKNLEIYEAVTSPQGPAMTWSMFAVGMELKD AVRARGLLDRSFANMAEPFKVWTENADGSGAVNFLTGMGGFLQA VVFCTGFRVTRAGVTFDPVCLSGISRVSVSIGIFYQGNKLNFSF SEDSVTVEVTARAGPWAPHLAEALWPSQSRSLPLPGHKVSPFRS AGRIQMSPPKLPSSSSSEFPGRFTFSDVRDPLQSPWVTLGSSSP TESLTVDPASE*SGTGASETSLGPSLWRLHPPLLGTLTLLACHPS PAARLSGKVHAAWPEFKAFCL |
| 6846 | 213 | 1258 | LYFLKTIK*LNRLAEHP*YENEXLTKLRNTIMEQYTRTESARG IIFTKTRQSAYALSQWITENEKFAEVGVKAHLIGAGHSSEFKP MTQNEQKEVISKFRGTGKINLLIATTVAEGLDIKECNIVIRYGL VTNEIAMVQARGRAREDESTYVLVAHSGSGVIEHETVNDPREKM MYKAHCVQNMKPEEYAHKILELQMQSIMEKKMKTKRNIKHYK NNPSLITFLCKNCVLA CSGEDIHVIKMHVNMTPFEKELYIV RENKTLQKKCADYQINGEII CKCGQANGTMMVHKGLDLPCLKIR NFVVVFKNNSTKKQYKKWVELEITFPNLDYSECCLFSD |
| 6847 | 1450 | 348 | SMCWNSDRLEMPDILALILYPPSYVPTGHLSDDSLRSKYCLT WFEDALNGVL*RAEAIQPHCVNAGDRMEKFRQKYWNKLOTLRQF PFAYGTLTVRSLLDTREHCLNEFPDPYSKVQRENGVALRCF PGVVRSLDALGWEERQALVKGGLLAGNVFDWGAKA VSAVLES DP YFGFEAKRKLQERPWLVDSYSEWLQRLKGPFFHKCALIFADNSG IDII LGVFPFVRELLLRGTEVILACNSGPA LNDVTHSESLIVAE RIAGMDPVVHSA LREERLLLVQTGSSSFCLDLSRLDKGLAALVR ERGADLVVIEGMGRAVHTNYHAALRCESLKLAVIKNAWLAE RLG GRLFVIFKYEVP AE |
| 6848 | 19 | 16 | AMWWSLDGIRNIVLSNPKKRNTLSLAMLKSLQSDILHDADSND LKVI IISAE GPVFS SGHDLKELTEEQGRDVAEVFQTC SKVM MH IRNHPVPVIA MVNGLATAAGCQLVASCDI AVASDKSS FATPGVN VGLFCSTPGVALARAVPRKVALEMLFTGEPI SAQEALLHGLLNK VVP AEALQEETMRIARKIASLSRPVVS LGKATFYKQLPQDLGTA YYLTSQAMVDNLALRDGQEGITAFLOKRPVWSHEPV*VEH |
| 6849 | 70 | 821 | SLGVDGSCLEQGSFAPRPOTDTSP*PVGNNWATQEDLYHQSYEC VCVLFA SVDPDFKEFYSESNINHEGLECLRLNEI IADFDL LSK PKPSGVEKIKTIGSTYMAATGLNATSGQDAQDAERSCSHLGTM VEFAVALGSKLDVINKHSFNNFRLRVGLNHGFV VAGVIGAKPKQ YDIWGN TVNVASRMESTGV LGKIQTVEETAWALQSLGYTCSRG VIKVGKGQLCTYFLNTDLTRTGPPSATLG |
| 6850 | 2 | 1235 | ARGLNHEWTFEKLQHISRNAQDKQLHLFMLSGVPDAVFDLTD LDVLKLELIPEAKIPAKISQMTNLQELHLCHCPAKVEQTAFSFL RDHLRCLHVKFTDVAEIPAWVYLLKNLRELYLIGNLSENKMI GLESRLRELRLHLKILHVKSNTKVP SNITDVAPHLTKLVHNDGT KLLVLNSLKKMMNVAELELQNC ELERI PHAIFSLSNLQELDLKS NNIRTIEEII SFQHLKRLTCLKLWNHNI VTIPPSITHVKNLESL YFSNNKLES LPVAVFSLQKLRCLDVSNNISMIP IEIGLLQNLQ HLHITGNKVDILPKQLFKCIKLRTNLGQNCITSLPEKVGQLSQ LTQLELKGNC LDR LPAQLGQCRMLKSGLVVEDHLFDTLPLEVK EALNQDINIPFANGI |
| 6851 | 1765 | 660 | VSAQVSAREGENCLGWNLADSSQESYKSL EEAEDCYP PSLTLD LRDLFNQVEQG PLLSCP KAGTDL SMGRAREVGWMAAGLMIGAGA CYCVYKLTIGRDDSEKLEEGEEEDDDQELDEEEDPDIWDFET |

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|------------|--|--|---|
| | | | MARPWTEGDGWTPEGAPGGTDRPSGGGKANRAHPKIQRPFPYEHKNTWSAQNCCKNGSCVLDLSKCLFIQGLLFAEPK DAGFPFSQDINSHLASLSMARNTSPTPDPTVREALCAPDNLNASIESQGGIKMYINEVCRETVSRCNSFLQQAQGLNLLISMTVINNMLAKSASDLKFPLISEGSGCAKVQVLKPLMGLSEKPVLAGELVGAQMLFSPMSLFIRNGNREILLETPAP |
| 6852 | 1 | 407 | RTRGEEYANFKHNDGKNIFYAARTPATLFAVMFAMYIISGLTGFIGLNSIAVLCNLVMGLALIFLCTWAYVKYSGEFREIGTVIDQIAETLWEQVLKPLGDNLMENIRQSVTNSIKAGLTDQVSHHARKTD |
| 6853 | 3 | 469 | GDSCAVCTIELYKPNLVRILTCHNIFHKTCVDPWLLHRTCPMCKCDILKALGIEVDVEDGSVSLQVPVSNEIFNSASSHEEDNRSETASSGYASVQGTYPPELEHVQSTNESLQLVNHEANSVAVDVIPHVDNPTFEEDETPNQETAVERIKS |
| 6854 | 1148 | 585 | HESYIGTFDPGELCVCAAIQWLQDNSASYFLNRKLVYEPSTQAKPVKNTFLRMWYISHHIYQQDLRKKILDVGKRLDVTGFCMTGKPGIICVEGFEKHCBEFWHTIRYPNWKHISCKHAESVETEGNGEDLRLFHSFEELLLEAHGDYGLRNDYHMLNGQFLFLKHKHSEHFQILFGIESKSSDS |
| 6855 | 1913 | 1148 | GRVGGVGRICSPLSGANEYIASTDTLKTEEVLLFTDQTDLLAKEPTSLFQDSETKGESGLVLEGDKEIHQIFEDLDKKLALASRFYIPEGCIQRWAAEMVVALDALHREGIVCRDLNPNNILLNDRGHIQLTYFSRWSEVEDSCSDAIERMYCAPEVGAITEETEACDWNWSLGAVLPELLTGKTLVECHPAGINTHTTLNMPWVSEARS LIQOQLQFNPLERLGGAGVAGVEDIKSHPFPTVDWAEIMR |
| 6856 | 1617 | 997 | VTQLYVSVDASTKDSLKKIDRPLFKDFWQQLDSLKALAVKQORTVYRLTLVKAWNVDLQAYAQVSLGNPDFIEVKGVTYCGESSASSLTMAHV PWHEEVVQFVRELVDLIPEYIACEHEHSNCLLIAHRKFKIGGEWWTWINYRPFQELIQEYEDSGGSKTFSADYMARTPHWALFGASERGFDPKDRHQRKNKSKAISGC |
| 6857 | 1 | 617 | KGPEATAMVCVCSHPNCRQNHKPSHSAAQWCGSPTPASAPNHLKLMAMEQGGTLPSATEDAKEEGLEAQISR LAELIGRLESKALWDLQQLRSDDEGTNMHLQVLRQEMAVCPQLSEFLDSLRLQYLRGTGTVRNCFHITAVRLSDGFTFVIYEFWETEEAWKRHLQSPICKAFRHVKVDTLQSPEALSRLVPAWACTVGRD |
| 6858 | 2 | 669 | RSRGIKDFENDPPLSSCGIFQSRIAGDALDLSGIRISSVFASPALRCVQTAKLILEELKLEKKIKIRVBPGEFENTKWEAGKTTPTLMSLEELKEANFNIDTDYRPAFPLSALMPAESYQEYMDRCTASMVQIVNTCPQDTGVILIVSHGSTLDSCTRPLLGLPPRECGDFAQLVRKIPSLGMCFCENKEEGKWELVNPVKTLTHCANAAFNRNWNISGN |
| 6859 | 1 | 1150 | GETMPKKAKTKAKKKPRKRS DSSGGYNLSDI IQSPSSSTGLLKSGKINSVESLPELLTSDSEGSYAGVGSFRLQSPDFTTGFSHDKIEAKVKPYVNGTSPVYSREDLKPEWKSPIKISAPQPIPSNRIDTSSASWVAGSFSPVSPVVDLRTIMEIEESRQKCGATPKSHLGTVSHGVKLSQKQRMIALTTKENSGMNSMETVLFPSKAPKPVNAWASSLSHVSSKSRFDLLEKKSVTSHSSGDHVKKVSFKGIENSQAPKIVRCSTHGTGPEGNHISDLPLDSPNPWLSSTVAPSMVAPVTFASIVBEELQQAALIRSREKPLALIQIEHAIQDLLVLYEAFGNPEEFVIVERTPOGPLAVPMWNKHGC |
| 6860 | 1889 | 1515 | DKDKKRQKKRGIFPKVATNIMRAWLFQHLTHPYPSSEQKKQLAQDTGLTILQVNNWFINARRIIVQPMIDQSNRAVSQGAAYSPEGQPMGSFVLDGQOHMGIRPAGPMSGMGMNMGMDGQWHYM |
| 6861 | 1889 | 1515 | DKDKKRQKKRGIFPKVATNIMRAWLFQHLTHPYPSSEQKKQLAQDTGLTILQVNNWFINARRIIVQPMIDQSNRAVSQGAAYSPEGQPMGSFVLDGQOHMGIRPAGPMSGMGMNMGMDGQWHYM |

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|------------|--|--|--|
| 6862 | 2 | 471 | MGSFVLDDGQOHMGIRPAGPMSGMGMMGMMDGQWHYM EEIDREFHNKLLKEDKLEKQEKPVNGEDKGDGSGVDTQNSEGNA DEEDPLGPNCYDKTKSFFDNISCDNRERRPTWAEERRLNAET FGIPLRPNRRGGYRGRGGLGFRGGRGGGGGGTPTAPRGFRG GFRGGRGGREFADFEYRKTAFGP |
| 6863 | 2216 | 487 | PQEPALKSEFSQVASNTIPLPLPQPNCTCKDNGPCKQVCSTVGGG AICSCFFPGYAIMADGVSCEDQDECLMGAHDCSRRQFCVNTLGSGF YCVNHTVLCADGYILNAHRKCDVINECVTDLHTCSRGEHCVNTL GSFHCYKALTCEPGYALKDGECEVDDECAMGTHTCQPGFLCQNT KGSFYCQARQRCMDGFLQDPEGNCVDINECTSLSEPCRPFGSCI NTVGSYTCQRNPLICARGYHASDDGTCKVDVNECTGVHRCGEG QVCHNLPGSYRCDCKAGFORDAFGRGCDVNECWASPGRLCQHT CENTLGSYRCSASCGLLAADGKRCEDVNECEAQRCSQECANIY GSYQCYCRQGYQLAEDGHTCTDIDECAQAGILCTFRCLNVPFGS YQCACPEQGYTMTANGRSCKDVDECALGTHNCSEATCHNIQGS FRCLRFECPPNYVQVSKTKCERTTCHDFLECQNSPARITHYQLN FQTGLLVPAHIFRIGPAPAFGTDTIALNIKGNEEGYFGTTRRLN AYTGVVVYLQRAVLEPRDFALDVEMLWRQGSVTTFLAKMHIFFT TFAL |
| 6864 | 2 | 2933 | LADSSPSNLQIITIKELLSMHHPDPAITKEFDYLPVDSRSSSG FVGLRNGGATCYMNAVFOQLYMGPGLPESLLSVDDTDNDPDDSV FYQVQSLFGLHMEKSLQYVVPENFWKIFKMNKELYVREQQDAY EFFTSLIDQMDEYLKKMGRDQIFKNTFQGIYSQDKICKDCPHRY EREEAFMALNLGVTSCQSLEISLDQFVRGEVLEGSNAYYCEKCK EKRTITVKRTCIKSLPSVLVIHLMRFGFDWESGRSICYDEQIRFP WMLNMEPYTVSGMARQDSSSEVGENGRSVDQGGGSGPRKKVALT ENYELVGVIVHSGQAHAGHYYSFIKDRRGCGKWKYKFNDDTVE EFDLNDTELEYECFGEYRPKVYDQTNPNYTDVRRRYWNAFMLFY QRVSDQNSPVLPKKSRVSVVRQEAEDLSLSAPSSPEISPSQSSPR PHRPNNDRLSILTKLVKKGKGLFVEKMPARIYQMVDRDENLKF MKNRDVYSSDYFSFVLSLASLNATKLKHPYPCMAKVSQLAIQ FLFQTYLRTKKLRVDTEEWIATIEALLSKSPDACQWLVEYFIS SEGRELIKIFLLECNVREVRVAVATILEKTLDLSALFYQDKLKS HQLLEVLALLDKDVPENCKNCAQYFFLFNTFVQKQGIKAGDLL LRHSALRHMISFLLGASRQNNQIRRWSSAQAREFGNLHNTVALL VLHSDVSSQRNVAPGIFKQRPPIISAPSSPLLPLHEEVEALLFM SEKGPYLLEVMFALRELTGSLALLIEMVVYCCFNEHFSFTMLH FIKNQLETAAPPHELKNTFQLLHEILVIEDPIQVERVKFVFETEN GLLALMHHSNHVDSSRCYQCVKFLVTLAQKCPAAKEYFKENSHH WSWAVQWLQKMSSEHYWTLQSNVSNETSSTGKTFTQRTISAQDTLA YATALLNEKEQSGSSNGSESSPANENGDRHLQGSSESPMMIGEL RSDLDVDP |
| 6865 | 1820 | 1242 | DPERWKHLSKVTPPGSSSVSTTPVQVRLQSPQSQSQSMMPSCNRS CSCSRGPSVEDGKWKYGVRSYLHLFVEGYAVPPKLEGIGEGEFLV LDQRAADYNQALGTCRLAGTALCVAAGVLLAICLFWAMIGWLSQ DTKAEPLDPEADSHVEVFGDEPEQLSPIFRNAGSQSWFSPPAS PFGQSSVQTIQPKRDS |
| 6866 | 1571 | 495 | DCPRPRYTLYGLRATCMRDLDWAWINAVSAFKALEQDLFPVNIKF IEGMEEBAGSVALEELVEKEKDRFSGVDYIVISDNLWISQKXP AITYGTGRNSYFMVEVKCRDQDFHSGTFGGILHEPMADLVALLG SLVDSSGHILVPGIYDEVVPLTEEBINTYKAIHLDLEBYRNSSR VEKFLFDTKKEILMHLWRYPSSLHIGIEGAFDEPGTKTVIPGRV IGKFSIRLVPHMNVSAVEKQVTRHLEDVFSKRNSNKNMVSMTL GLHPWIANIDDTQYLAAKRAIRTVFGTEPDMIRDGSTIPIAKMF QEIVHKSVVLLIPLGAVDDGEHSQNEKINRWNYIEGTLKFAAFPL EMAQLH |

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|------------|--|--|--|
| 6867 | 2833 | 1704 | GTRIMSQPKQKELAGFVRQKMLLDYSVVMGRCPVQESRSPQSRSP LQSAESSPTAGKKLPEVPPSEEEEEQEAOWNALLGRIFWDFLGEK YWSDLVSKKIQMKLSKIKLPYFMNELTLEDMGVAVPKILQAF KPYVDHQGLWIDLEMSYNGSFLMTLETMNLTKLGKEPLVEALK VGEIGKEGCRPRAFCLADSDEESSAGSSEEDDAPEFSGGDKQL LPGAEGYVGGHRTSKIMRFVDKITKSKYFQKATETEFIKKKIEE VSNTPLLLTVEVQECRGTLAVNIPPPPTDRVWYGFRKPPHVELK ARPKLGEREVTLVHVTDWIEKKLEQEFQKVFVMPNMDDVYITIM HSAMDFRSTSCLLKDPFVEAADQP |
| 6868 | 1 | 346 | RTPRPTRPEEIKNLILPYISDMNFVQDLCEDFYELFKTDKGF KATFESQMSVMRGQILNLTQALRDGKSPFQLVQIPCVIVERSQG GSQGRIVHLNSFTQTVNCRKPFSSW |
| 6869 | 3 | 1619 | MYMERMDKRALISFWESVEHLKNANKNEIPQLVGEIYQNFVES KEISVEKSLYKEIQQCLVGNKGIEVFYKIQEDVYETLKDRYYP FIVSDLYEKLLIKEEKHASQMISNKDEMGRDEAGEEAVDDGT NQINEQASFAVNKLRELNEKLEYKRQALNSIQNAKPKDKKIVSK LKDEIILIEKERTDLQHMARTDWCENLGMWKASITSGEVTEE NGEQLPCYFVMVSLQEVGGVETKNWTVPKRLSEFHNLRKLSEC VPSLKKDQLPSLSKLPPKSIDHTFMEKFNQNLKFLQNLSDER LCQSEALYAPLSPSPDYLVKVIDVQGGKNSFSLSSFLERLPRDF SHQEEETEEDSDLSYDGDVDGRKDALAEPCFMLIGEIFELRGM FKWVRRTLIALVQVTFGRTINKQIRDTVSNIFSEQMLVYINIF RDAFWPNGKLAPPTTIRSKEQSQETKQRAQQKLENIPDMLQSL VGQQNARHGIIKIFNALQETRANKHLLYALMELLIELCELRV HLDQLKAGOV |
| 6870 | 1 | 1566 | MAAVVAATRWQLLVLVLSAAGMGASGAPQPPNILLMLDDMGWG DLGVYGEPSRETPNLDRMAAEGLLFPNFYSANFLCSPSRAALLT GRLPIRNGFYTTNAHARNAYTPQEI VGGIPDSEQLPELLKKAG YVSKI V GKWHLGHHPQFHLKHFDEWFGSPNCHFGPYDNKARP NIPVYRDWEMVGRYEEFFINLKTGEANLTIYLYQALDFIKRQ ARHHPFFLYWAVDATHAPVYASKPFLGTSQGRYGDVAVREIDDS IGKILELQDLHVADNTFVFFTSNDAALISAPEQGGSGNGPFLC GKQTTFEQGMREPALAWWPGHVTAQVSHQLGSDMDLFTSLAL AGLTPPSDRAIDGLNLLPPTLLQGRMDRPIFYRGDTLMAATLG QHKAFWFTWINSWENFRQIDFCPGQNVSGVTTHNLEDHTKLPL IFHLGRDPGERPFLSFASAEYQEALSRTSVVQQHQEALVPAQP QLNVCNWAVMNWAPPGCCCKLGLCTPPESIPKKCLWSH |
| 6871 | 209 | 1126 | RMSLNPPIFLKRSEENSSKFVETKQSQTTSIASEDPLQNLCLAS QEVQLQKAQSGRSKCLKCGGSRMFYCYTCYVVENVP IEQIPLV KLPLKIDI IKHPNETDGKSTAIHAKLLAPEFVNIYTYPCIPYE EKDHEVALIFPGPQSIKDISFHLQKRIQNNVRGKNDDPKPS FKRKRTTEEQFCDLNDSKCKGTTLKKIIFIDSTWNQTNKI FTDE RLQGLLQVELKTRKTCFWRHQKGPDTFLSTIEAIYYFLVDYHT DILKEYRGQYDNLLPFYSFMYQLIKNAKCSGDKETGKLTH |
| 6872 | 880 | 459 | FGLLMVLSLIFMKGNCVREDLIFNFFLKLGLDVRETNGLFNT KKLITEFVVRQKYLEVRRIPYTEPAEYEFWGPRAFLSTKMLV LRFLAKLHKKDFQSWPFHYLEALACEWEDTDEDEPDGTGSAHG PISRPPPR |
| 6873 | 1929 | 955 | DEQAVLCSKDKTYDLKIADTSNMLLFI PGCKTDPQLKKEDSHCN I IHTEIFGFSNNYWLRRRRPKLKLKLLMENPYEGPDSQKEK DSNSSKYTTEDLLDQIQASEEIMTQLQVLNACKIGGYWRILEF DYEMKLLNHVTQLVDSESWFSGKVLNTCLQELGPLEPEEMIEH CLKCYGKKYVDEGEVYFELDADKICRAARMLLQNAVKNLAEF QEVWQQSVPEGMVTSLDQLKGLALVDRHSRPEIIFLLKVDDLPE DNQERFNSLSFLREKWEEDIAPYIQDLCEKQTI GALLTKYSH SSMQNGVKVYNSRRPIS |

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|------------|--|--|--|
| 6874 | 1 | 307 | DSIADHVNSAAVNVEEGTKNLGKAAKYKLAALPVAGALIGGMVG GPIGLLAGFKVAGIAAALGGVGLGFTGGKLIQRKKQKMMKELTS SCPDLPSTQDKKCS |
| 6875 | 1688 | 349 | VIGTGERGNSASEKWEIMFNEELGDPFIIHISISLLNAEEHSIA TLLLRIEKEELDMKSGSFVVSLEWVTISKKNQDNKKYEIIKRDI LRGKSVPHYAAIEPDGNGLMIVSYKSLTFVQAGQDLEENMDEDI SEKIKEPLYWQQTEDDLTVTIRLPEDNTKEDIQIQFLPDHINI VLKDHQFLEGKLYSSIDHESSTWIKESNSLEISLIKKNRGLTW PELVIGDKQKQELIRDSAQCAIAERLMHLTSEELNPNPDKEKPP CNAQLEECDIFFEESSSLCRFDGNTLKTTHVVNLGSNQYLFVS IVDPKEMPCFCLRHVDVALLWQPHSSKQDDMWEHATFNLGYV QASKRDKKFFACAPNYSYAALCECLRRVFIYRQPAPMSTVLYNR KEGRQVQVAKQVQVASELTNDPILGFOATNBRFLVLTKNLFLI KVNTEN |
| 6876 | 41 | 1285 | VGEMTLIWRHLLRPLCLVTSAPRILEMHPFLSLGTSRTSVTKLS LHTKPRMPPCDFMPERYQVIFLVNSGSEANLAMLARAHSNNI DIISFRGAYHGCSFYTLGLTNVGIYKMLPGGTGCOPTMCPDVF RGPWGGSHCRDSPVQTIKRCSCAPDCCQAKQYIEQFKDITLST VAKSIAGFFAEPIQGVNGVVQYKGFLEAFELVRARGGVCIAN EVQTFGRGLGSHFWGFQTHDVLDPDIVTMAKIGNGFFMAAVITT PEIAKSLAKCLQHFNFTFGGNPMACAIGSAVLEVIKEENLQENSQ EVGYMLLKFAKLRLDEFIIVGDVRGKGLMIGIEMVQDKISCRPL PREEVNQIHEDCKHMLLVGRGSIIFSQTFRAPSMCITKPEVDF AVEVFRSALTQHMERRAK |
| 6877 | 1 | 778 | GTSPSPARAYAPPTERRKPYQNVSIQEGEGFEINLDRKLTTP QAKLFTVPSEALAIAVATEWDSQQDTIKYYTMHLTTLCNTSLDN PTQRNKDQLIRAAVKFLDITDIYRVEEPETLVELQRNEWDPII EWAEEKRYGVEISSSTISMGPSIPAKTREVLSHLASYNWALQG IEFVAAQLKSMVLTGLIDLRLTVEQAVLLSRLEEYQIQKWGN IEWAHDYELQELRLARTAGTLFIHLCESTTVKHKLLKE |
| 6878 | 931 | 263 | QTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQGN LEEDTVTLVELVAPAVPSCVPSALSGTVVELRCQDKKEGNPAP EYTWFKDGIRLLENPRLSQSTNSSYTMNTKTGTLOFNVTSKLD TGEYSCEARNSVGYYRRCFGRMQVDDLNISGIIAAVVVVVALVIS VCGLGVCYAQRKGYFSKETSFKKSNSSSKATTMSENDFKTKSF II |
| 6879 | 3 | 845 | IRVIGESDIMQEFLESSENYNGVSDVELRVALPDGTTVTVRVK KNSTTDQVYQAIAAKVGMDSITVNYFALFEVISHSFVRKLAPNE FPHKLYIQNYTSAVPGTCLTIRKWLPTTEBILNDNDLAVTYF FHQAVDDVKGYIKAEKSYQLQKLYEQKRMVYLNMLRTCEGY NEIIFPHCACDSRRKGHVITAISITHFKLHACTEEGQLENQVIA FEWDEMQRWDTDEEGMAFCFEYARGEKKPRVWKIFTPTYFNYMHE CFERVFCELKWRKEEY |
| 6880 | 2110 | 1437 | RKDNCTAKEWTFPEAKWNTTARVFSHIRLGMGHVLIIVQCFISS MANIYNEKILKEGNQLTESIFIQNSKLYFFGILFNGLTGLGLQRS NRDQIKNCGFFYGHRAFSVALIFVTAFQGLSVAFILKFLDNMFH VLMAQVTTVITTVSVLVFDFRPSLEFFLEAPSVLLSIFIYNAS KPQVPEYAPRQERIRDLSGNLWERSSGDGEELERLTKPKSDESD EDTF |
| 6881 | 2638 | 2244 | NDSKWEDIHVITGALKMFFRELPEPLFTFNHFNDFVNAIKQEP QRVAAVKDLIRQLPKFNQDMQILFRHLRRVIENGEKNRMITYQS IAIVFGPTLLKPEKETGNIAVHTVYQNQIVELILLELSSIFGR |
| 6882 | 1 | 850 | GPEAQLWIYVPVSKCGVPVSEACTAMGLRSGNLRDRFWLVIN QEGNMVTAQBPRLLVLSLTCDGDTLTLAAAYTKDLLLPKTPPT TNAVHKCRVHGLEIEGRDCGEATAQWITSFLKSQPYRLVHFEPH MRPRRPHQIADLFRPKQIAYSSTSPFLILSEASLADLNSRLEK |

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|------------|--|--|--|
| | | | KVKATNFRPNIVISGCDVYAEDSWDELLIGDVELKRVMACSRCI LTTVDPTDGTGMSRKEPLETLKSYRQCDPSEKLYGKSPLFGQYF VLENPGTIKVGDPVYLLGQ |
| 6883 | 2794 | 2256 | NSKLLNQNKLKLFITLTQVLSLHGWGPGIHLQKEGAFPPVTQNR ALQLLYDLRYLNIIVLTAKGDEVKSGRSPKDSRIEKVTDHLEALI DPFDLDVFTPHLSNLHRLVQRTSVLFGLVGTENQLAPRSSTF NSQEPHNILPLASSQIRFGLPLSMTSTRKAKSTRNIETKAQYD ANC |
| 6884 | 2 | 99 | EFERVTAEAVKPRETSEPRAAAQRCEKFPPL |
| 6885 | 297 | 1554 | STGQFWHVDLHLDFTYHITDDHTKVCASSKGANASNPFGPDV LCDSPYQLILSAFDFIKNSGQEASFMWTGDSPPHVPVPELST TVINVITNMTTTIQSLFPNLQVFPALGNHDYWPQDQLSVVTSKV YNAVANLWKPWLBEEAISTLRKGGFYQKVTNPNLRIISLNTN LYYGNIMTLNKTDPANQFEWLESTLNSSQNKKEVYIIAHVPV GYLPSSQNTAMREYYNEKLIDIFQKYSVDIAGQFYCHTHRDSI MVLSDKKGSPVNSLFVAPAVTPVKSVLEKQTNPNPGRILFQYDPR DYKLLDMLQYYLNLTEANLKGESIWKLEYILTQTYDIEDLPES LYGLAKQFTILDSKQFIKYNYFFVSVYDSSVTCDKTKCAFPQICA IMNLDNISYADCLQQLYIKHNY |
| 6886 | 2 | 1341 | QCGGIPREGGSSRPLEEGTGSSPACVRGAAPGSEDAFYPTRAK QARVSQELKKAARTVSISEGPDTLGDGMRRERETLALAPEPEP LEKEACEKWKRPFRSASATSLTSHCVDVVGKLLDFKKRRGHSI GGAPEQRYQIIPVCVAARLPTRAQDVLDLHSEVNAVRFPGNSS LLATGGADRLIHLWNVVGSRLEANQTLLEGAGGSI TSVDPDFSGY QVLAATYNQAAQLWKVGAEQSKETLSGHKDKVTAAKFKLTRHQ VTGSRDRTVKEWDLGRAYCSRTINVLSCNDVVCGDHIIISGHN DQKIRFWDSRGPHCTQVIPVQGRVTSLSLSDQLHLLSCSRDNT LKVIDLRVSNIRQVFRADGFKCGSDWTKAVFSPDRSYALAGSD GALYIWDVDTGKLESRLQGGPHCAAVNAVANCYSGSHMVSVQDGR KVVWQ |
| 6887 | 1047 | 116 | WVARPSQKPFWEAGAVPGDPLSTGCSQAQLGGCCPRGPWGPQHG QQRAAGPTLPRGERGGPQQSGPGLAAQTPTTSKQVAVRAFLTG TYRSQSPRSPAGPFRGGTGWWPEPAVCLCVAVGPQRLSSPGLVY NAGSSEHCYDIYRLYHSCADPTGCGTGPDAWARDYQACTEINTL FASNNVTDMFPDLPFTDELQRQYCLDTGWVWPRPDWLLTSFWGG DLRAASNIIFSNGNLDPWAGGGIRNLSASVIAVTIQGGAHLLD LRASHPEDPASVVEARKLEATIIGEWVKAARREQPALRGGPRL SL |
| 6888 | 1 | 992 | FVAVVKEIPHIWVTHCLLNPHALVIKTLPTKLRDALFTVVRVI NFIKGRAPNHRLEQAFEEIGIEYSVLLFHTEMRWLSRGQILTH IFEMYEEINQFLHKKSSNLVDGFENKEFKIHLAYLADLFKHLNE LSASMQRGTGMNTVSAREKLSAFVRKFPFWQKRIEKRNTFNFPFL EEIIVSDNEGIFIAAEITLHLQQLSNFFHGYFSIGDLNEASKWI LDPFLFNIDFVDDSYLMKNDLAELRASGQILMEFETMKLEDFWC AQFTAFPNLAKTALEILMPFATTYLCELGFSITFTFQNKVPEAA LILSDDIRVAISKVPSFLGHH |
| 6889 | 1 | 1534 | LTLENQIKEEREQDNSESPNGRTSPLVSQNEQGSTLRDLLTTT AGKLRVGS TDAGIAFAPVYSMGAPSSKSGRTMPNILLDDI IASVV ENKIPPSKTSKINVKPELKEEPEESIISAVDENNKLYSDIPHSW ICEKHILWLKDYKNSSNWKLEKCNKQGGPQAVVSGVHKMNISL WKAESI SLDFGDHQADLLNCKDSIISNANVKEFWDGFEEVSKRQ KNKSGETVVLKLDWPSGEDFKTMMPARYEDLLKSLPLPEYCNP EGKFNLAHLPGFFVRPDLGPRLC SAYGVVAAKDHDIGTTLNLI EVS DVVNILVYVGIAGNGILSKAGILKKFEEEDLDDILRKRKL DSSEIPGALWHIYAGKDVVKIREFLQKISKEQGLEVLPEHDP IR DQSWYVNNKLRQLLEBYGVRTWTLIQFLGDAIVLPAGALHQVQ |

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|------------|--|--|---|
| | | | NPHSCIQVTEDFVSPEHLVESFHLTQRLRLKKEINYDDKLQVK NILYHAVKEMVRALKIHEDEVDDMEEN |
| 6890 | 3 | 667 | THACGMWIPLYLHRLVVKHTAETCNSPPCGAKDSLIFGATTCF TGFLGVDTGAGATRWCRKTORADPLVCAVGLGSAIFICLIFV AAKSSIVGAYICIFVGETLLFSNWAITADILMYVVIPTRRATAV ALQSFTHLLGDAGSPYLGIFISDLIRQSTKDSPLWEFLSLGYA LMLCPFVVVLGGMFFLATALFFVSDRAREEQVQNQLAMPASVK V |
| 6891 | 1980 | 1262 | LRHQELLSKELKLLRGITIESIIHIGLAAGKEQFMQDASNMVQ LLLKTQSHLYNMEDNNPEVRQAAAYGLGVMAQFGDDYRSLCSE AVPLLVKVIKRAHSKTKKNVIATENCISAIGKILKPKPNCVNVN EVLPHWLSWLPHEDEKELAIQTLSFLCDLIESNHPVVGPNNSN LPKIIISIIAEGKINETINYEDPCAKRLANVVRQVQTSSEDLNLEC VSQDDEQEQEALQELLNFA |
| 6892 | 3 | 876 | RSVAAASGPGAWGTDHYCLELLRKRDEYGYLCSLLLPASRSSV FALRAFNVELAQKDSVSEKTIGLMRMQFWKKTVEDIYCDNPPH QPVAIELWKAVKRHNLTKRWLKIVDEREKNLDDKAYRNKELE NYAENTQSSLLYLTLILGKIDLHADHAASHIGKAQGIIVTCLRA TPYHGSRRKVFLEPMDICMLHGVSQEDFLRRNQDKNVRDVIYDIA SQAHLLHLKARSFHKTVPVKAFFAFLQTVSLEDFLKKIQRVDFD IFHPSLQKQNTLLPLLYLYIQSWRRTY |
| 6893 | 1 | 842 | DGERKSMVSVERTFSEINKAEQYSLCQELCSELAQDLQKERLKG RTVTIKLKNVNFVKTTRASTVSSVVSTABEIFAIAKELLKTEID ADFPPLRLRLMGVRISSFPNEEDRKHQQRSTIGFLOAGNQALS ATECTLEKTDKDKFVKPLEMSHKKSFFDKRSERKNSHQDTFKC EAVNQSFQTSQPPQVLKKMMENLEISENSDDCQILTQPCVCFR AQGCISLEALNKHVDECLDGGPSISENFKMFSCSHVSATKVNKKE NVPASSLCEKQDYEAH |
| 6894 | 1742 | 1463 | TTLCKPLVPREHQFYETLPAEMRKFTPOYKGSQELLEGLPHWRG VDVRGHRGPWPQPSLEPSLPFTLCFPLSSFSSSWPSAHLTPS VFNFVW |
| 6895 | 2379 | 478 | VTVVELCDLASPTALLIMRTVLDLIVEDLQSTSEDEKQYTSQT TRLALLALASHKACKLAILHLINGTIKGDERYAEIFQDLLAL VRSPGDSVIRQQCQVEYVTSILQSLCDQDIALILPSSSSEGSISEL EQLNSLBNKELMTSICDCLLATLANSESSYNCLLTCVRTMMFL AEHDYGLFHLKSSLRKNSSALHSLKRVVSTFSKDTGELASSFL EFMRQILNSDTIGCCGDDNGLMEVEGAHTSRMTSINAELKQLL QSKEESPENLFLELEKLVLEHSKDDDNLDLSDSVVGLKQMLLES SGDPLPLSDQDVEPVLSAPESLQNLFMNRTAYVLADVMDQLKS MWFTPFQAEIITDLDLVKVDLIELSEKCCSDFDLHSELSRFL SEPSSPGRTTKTKGFKLGKHKHETFITSSGKSEYIEPAKRAHV PPPRGRGRGGPGQGIKPHDIFRQRKQNTSRPPSMHVDVFAAES KEVVPQDGIPPPKRPLKVSQKISSRGGFSGNRGGRGAFHSQNR FTPPASKGNYSRREGTRGSSWSAQNTPRGNYNESRGGSQSNFNR PLPPLRPLSSTGYRPSPRDRASRGGLGPSWASANSNGSGSRG KFVSGSGRGRHVRSFTR |
| 6896 | 1 | 555 | GNIVIQKKYKQHIIPLENVTIDSIDEGDLRNGWLKTPKTS FAVYAATATEKSEWMNHINKCVTDLLSKSGKTPSNEHAAVVVD SEATVCMRCQAKFTPVNRRHCRKCGFVVCGPCSEKRFLLPSQ SSKPVRIICDFCYDLLSAGDMATCQPARSDSYSQSLKSLNDMSD DDDDDDSSD |
| 6897 | 3 | 920 | GDGLMHEVVNGLMERPDWETAIQKPLCSLPAGSGNALAASLNHY AGYEQVTNEDLLTNCTLLCRLLSPMNLSSLHTASGLRFLSVL SLANGFIADVLESEKYRRLGEMRFTLTGTLRLAALRTYRGRLA YLPVGRVGSKTASEVTVVQGGPVDAHLVPLEEPVPSHWTVVEDE DFVLVLALLHSHLGSEMPAAMPGRCAAGVMHLFYVRAGVSRAML |

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|------------|--|--|--|
| | | | LRLFLAMEKGRHMEYECFYLVPVFAFRLEPKDGKGVFAVDGE LMVSEAVQGGQVHPNYFWMVSGCCEPPSWKPPQMPPEPL |
| 6898 | 919 | 346 | QKTVTAVASLLKGRQGIYTENERRMGAUVRFFKIMLVLTICW LSNI INESLLFYLEMQTDINGGSLKPVRTAAKTTFWIMGILNPA QGFLLSLAFYGTGCSLGFQSPRKEIQWESLTTSAABGAHPSPL MPHENPASGKVSQVGGQTSDEALSMLESGSDASTIEHTASESC NKNEGDEALPTHGDL |
| 6899 | 120 | 827 | MKVRKNNDAYLLDNKINMDCFISCFKKMLTLMFHSHGILSL LEHGEEYTFSLPCAYARSILTPVWVELGGKVSVCNCAKTGYSASI TFHTKPFYGGKLHRVTAEVKHNTNTVVCVQGEWNSVLEFTYS NGETKYVDLTKLAVTKKRVPRLEKQDPFESRRLWKNVTDLSLRES EIDKATEHKHTLEERQRTTEERHRTETGTPWKTKYFIKEGDGWVY HKPLWKIIPITQPAE |
| 6900 | 3 | 451 | TEVLGSKGIHELRSSTALHHALESASLLTMFWRAALPSTHIP VLPKGVGESTERELLELRKTVSQEQQLQSTTEHLKNAQKQES MEQFIVSQLTRTHDVLKARTNLEVRKLLHQSEAPSLSPTHHP LADLVGDSWPAIRFOEK |
| 6901 | 1 | 201 | DDNMVQRLTDFKMTLQQQSTLEQWAAWLDNVMQALPKPYEGRP SFPKAAARQFLKWSFYRYHLGFS |
| 6902 | 2 | 267 | GAPPPFPSPQPPQAPSSHPHSDLTNFPSSALEGQAGAQA SDMPBPDLDELTPNDELLESLYLDPPDLPSNSNDLLSLFENN |
| 6903 | 1 | 149 | RINQVYRQGETGIHILVIDQMVFQDESCFLFSTVKAESSDGI HIILK |
| 6904 | 464 | 2092 | MEASLPVSLSCVLACGDVEGKFDILFNVRQAIQKKSNGFDLLC VGNFFGSTQDAEWEYKGTGKKAPIQTYVLGANNQETVKYFQDA DGCELAENITYLGRKGIFTGSSGLQIVYLSGTESLNEPVGYSF SPKDVSSLRMMLCTTSQFKGV DILLTSPWPKCVGNFGNSSGEVD TKKCGSALVSSLATGLKPRYHFAALEKTYERLPYRNHILQEN AOHATRFIALANVGNPEKKKYLYAFSIVPMKLMDAELVKQPPD VTENPYRKSGQBASIGKQILAPVEESACQFFFDLNEKQGRKRSS TGRDSKSSPHKQPRKPPQPPGCPWFCCLASPEVEKHLVNVIGTH CYLALAKGGLSDHVLILPIGHYQSVVLSAEVVEVEKYKATL RRFFKSRGKWCVVFNRYKSHHLQLQVIVPVPISCSTTDDIKDAF ITQAEQQIELLEIPEHSDIKQIAQPGAAFYVELDTGEKLFHR IKNFPLQFGREVLASEAILNVDPKSDWRQCCQISKEDETLARR FRKDFEYDFTLDD |
| 6905 | 1 | 226 | VSKTGEAETITSHYLFALGVYRTLYLFNWIWRVHFEGFFDLIAI VAGLVQTVLYCDDFFLYITKVLKGGKLSLPA |
| 6906 | 3 | 611 | SYDDHNGHIDFITAAASNLRKMYSEIADRFRTKRIAGKITPAI ATTATVSGLVALEMIKVTGGYPFEAYKNWFLNLAIPIVFTET TEVRKTKIRNGISFTIWRWTVHGKEDFTLLDFINAVKEKYGIE PTMVVGKMLYVPVMPGHAKRLKLTMHKLVKPTTEKKYVOLT SFAPDIDGDEDLPGPPVRYFSDTD |
| 6907 | 2 | 2228 | LRGVVWAAAGAFRFSSEESTSHLIMSRRSRQLTRYSGDDDDGS SSSGSSVAGSQSTLFKDSPLRTLKRKSSNMKRLSPAPQLGPSS DAHTSYYESLVHESWFPFRSSLEELHGDANWGEDLRVRRRGT GGSESSRASGLVGRKATEDFLGSSSGYSSSEDDYVGYSDDVQSS SSRLRSVAVSRAGSLLMVATSPGRFLRLLYWAGITWYRLTTAA SLLDVFLTRRFSSSLKTFWFLPLLLLTCLTYGAWFYFYPYGLQ TFHPALVSWAAKDSRRADGWEDSSPHFQAEQVRMSRVHSL ERRLEALAEFSSNWQKAMRLERLELRQCAPGQGGGGGLSHBD TLALLEGLVSRREAALKEDFRRETAARIQEELSALRAEHQDSE DLFKKIVRASQSEARIQQLKSEWQSMQTQESFQESSVKELRRL DQLAGLQQLAALALKQSSVABEVGLLPQQTQAVRDDVESQFPA WISQFLARGGGGRVGLLQREEMQAQLRELESKILTHVAEMQGGKS |

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|------------|--|--|---|
| | | | AREAAASLSLTQKEGVIGVTEEQVHHIVKQALQRYSEDRIGLA DYALESGGASVISTRCSYETKTALLSLFGIPLWYHSQSPRVI LQPDVHPGNCWAFQGPQGFVAVRLSARIRPTAVTLEHVPKALSP NSTISSAPKDFAIFGFDEDLQOEGTLLGKFTYDQDGEPIQTFHF QAPTMATYQVVELRILTNWGHPEYTCIYRFRVHGEPAH |
| 6908 | 3 | 780 | QVPSAAWLMMAVCGLSRLGLGSRLLGLQCGFGAARLLYFRFQSRG PQGVEDGDRPQPSKTPRIPKIYTKTGDKGFSSTFTGERRPKDD QVFEAVGTTDELSSAIGFALELVTEKGTFAEELQKIQCTLQDV GSALATPCSSAREAHLKYTTFKAGPIELEQWIDKYTSQLPPLT AFILPSGGKISSALHFCRAVCRAERRVPLVQMGETDANVAKF LNRLSDYLFTLARYAAMKEGNQEKIYKNDPFAESSEGL |
| 6909 | 3 | 409 | GRLLAVGTDLYGQRSSAPEQELLVQDATFVNSLLPEKAFSDIP SPYLRGTIKMMQAVRQAFQDQDDRRTWDRPLTMAATFDDCLYA LCVVDITIKRSSQTGEWQNIAMTEPELSPAYLISEAMRRSRMS LYC |
| 6910 | 1 | 1068 | LVPVVVIDSYYYGKLVIAPLNIVLYNIFTPHGPDLYGTPEWYFY LINGPLNPNVAFALALLVPLTSLMEYLLQRFHVQNLGHPYWL LAPMYIWFIIFFIQQHKEERFLFPVYPLICLCAVALSALQHSF LYFQKCYHFVFORYLEHYTVTSNWLALGTVFLGLLSFGRSVA LFRGYHGPLDLYPEFYRIATDPTIHTVPEGRPVNVCVGKEWYRF PSSFLPDNWLQLOFIPSEFRGQLPKPFAEGPLATRIVPTDMNDQ NLEEPSRYIDISKCHYLDVLDTMRETREPKEYSSNKEEWISLAY RPFLLDASRSSKLLRAFYVFFLSDQYTVVYNTILKPRKAKQIRK KSGG |
| 6911 | 1184 | 966 | GEDAEEMETGCVANLISIFGSSFSGLLRKSPGGGREEEEGEESG PEAAEPGQICCDKPVLRDMNPWSTAI VAF |
| 6912 | 1 | 844 | AMKPVETHSFOMLTITLSTGSALKQSYEDAYRCTIKSSITLIGSI SGGTDIISCFMGNHNSLPVYKGEIQARNLGMAVEAWNEEGKAVW GESGELVCTKPIPCQPTHFWNDENGKRYKAYFSKFPPIWAHGD YCRINPKTGGIVMLGRSDGTINENGVRFGSSEIYNIVESFEEVE DSLCPVQYNYREERVILFLKMASGHAFQPDLVKRIIRDAIRMGL SARHVPSLILETKGIPYTLNGKKEVAVKQIIAGKAVEQGGAFS NPETLDLYRDIPELQGF |
| 6913 | 1643 | 1558 | KKSHEESHKEELSYGAQASLPLPCSDFR |
| 6914 | 1251 | 615 | ELAAECKSAGYPGTLPYRCDLNEDILSMFSAIRSQHSGVDI CINNAGLARPDTLTSGSTSGWKDMFNVNVLALSICTREAYQSMK ERNVDDGHIININSMGHRVPLSVTHFYSATKYAVTALTEGLR QELREAQTHIRATCISPGVVEQFAPFKLHDKDPEKAAATYEQMK CLKPEDVAEAVIYVLSTPAHIQIGDIQMRPTEQVT |
| 6915 | 254 | 652 | GRSLSFKTFLIWVLISYQGGILMYGALVLFSEFVHVVAISFT ALILTELLMVALTVRTWHWLMVVAEFLSLGCVVSSLAFLNEYFD VAFITTVTFLWKVSAITVVSCLPLYVLKYLRRKLSPPSYCKLAS |
| 6916 | 254 | 652 | GRSLSFKTFLIWVLISYQGGILMYGALVLFSEFVHVVAISFT ALILTELLMVALTVRTWHWLMVVAEFLSLGCVVSSLAFLNEYFD VAFITTVTFLWKVSAITVVSCLPLYVLKYLRRKLSPPSYCKLAS |
| 6917 | 254 | 652 | GRSLSFKTFLIWVLISYQGGILMYGALVLFSEFVHVVAISFT ALILTELLMVALTVRTWHWLMVVAEFLSLGCVVSSLAFLNEYFD VAFITTVTFLWKVSAITVVSCLPLYVLKYLRRKLSPPSYCKLAS |
| 6918 | 28 | 921 | PEACTRSWREPDPELRRFLLSAACRSFPQWLPGGGGGVSSCS DTPVPYLLAVKSEPRFAERQAVRETWGSAPGIRLLFLLGSP VGEAGPDLDSLVAWESRRYSDLLWDFLDVFPNQTLKDLLLLAW LGRHCPTVSFVLRAQDDAFVHTPALLAHLRALPASARSYLGE VFTQAMPLRKPGGPFYVPESFFEGGYPAYASGGGYVIAGRLAPW LLRAAARVAPFFEDVYTGLCIRALGLVPQAHPGFLTAWPADRT ADHCAFRNLLVVRPLGPQASIRLWKQLQDPRLQC |

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|------------|--|--|--|
| 6919 | 850 | 41 | QGRRELSGSVFCFFIQQEPKEMLTSEYHERVRSQGQQLQQLQA ELDKLHKEVSTVRAANSERVAKLVFQRLNEDFVRKPDYALSSVG ASIDLQKTSHDYADRNTAYFWNRFSFWNYARPPTVILEPHVFPF NCWAFEGDQGVVQLPGRVQLSDITLQHPSPSVEHTGGANSAP RDFAVFLLSFFTHQGLQVYDETEVSLGKFTFDVEKSEIQTFHL QNDPPAAPPVKVIQILSNWGHPRPTCLYRVRAHGVRTSEGAEGS AQGPH |
| 6920 | 1418 | 591 | EAQGSPKSVHLTLK |
| 6921 | 2 | 1711 | MNATRSSEQFHVINHAEQTLRKMEVNLKKEQLCDVLLIAGHLRI PAHRLVLSAVSDYFAAMFTNDVLEAKQBEVRMEGVDPNALNSLV QYAYTGVQLKEDTIESLLAAACLLQLTQVIDVCSNFLIKQLHP SNCLGIRSPGDAQGCTELNLVAHKYTMHFIEVIKNQEFLLLP NEISKLLCSDDINVPDEETIFHALMQVWGHVQNRQGEGLMLLS YIRLPLLPQLLADLETSSMFTGDLCEQKLLMEAMKYHLLPERR SMMQSPRTKPRKSTVGALYAVGGMDAMKGTITIEKYDLRTNSWL HIGTMNGRRLLQFGVAVIDNKLYVVGGRDGLKTLNTECFNPVGK IWTVMPPMSTHRHGLGVATLEGPMYAVGGHDGWSYLTVERWDP EGRQWNYVASMSTPRSTVGVALNNKLYAIGGRDGSCLKSMY FDPHTNKWSLCAPMSKRGGVGVAITYNGFLYVVGHDAPASNHC SRLSDCVERYPKGDSDWSTVAPLSVPRDAVAVCPLGDKLYVVG YDGHYTLNVTESYDAQRNEWKEVPPVNIAGRACVTVVVKLP |
| 6922 | 1075 | 369 | LTPPAGIRHEVRDREREREREREREKFPDSTGSELKQNTHSIT GLPPAMQKVMYKGLAPEDKTLREIKVTSGAKIMGGSTINDVLA VNTPKDAAQDQAKAENKKEPLCRQKQHRKVLDKGKPEDVMPVS KGAQERLPTVPLSGMYNKS GGVRLTFKLEQDQLWIGTKERTK LPMGSIKNVSEPIEGHEDYHMMAPQLGPTBASYYWVWPTQY VDAIKDTVLGKWKQYF |
| 6923 | 2469 | 1660 | LGLFCILPIDTLCAVLERDLSIRESRLFGAVVRWAEACQROQ LPVTFGNKQKVLGKALSLIRFPLMTIEBFAAGPAQSGILSDREV VNLFLHFTVNPKEPRVEYIDRPRCCLRGKECCINRFQQVESRWGY SGTSDRIRPTVNRISIVGFGLYGSIHGPTDYQVNIQIIIEYEKK QTLGQNDTGFS CDGTANTFRVMFKEPIEILPNVCYTACATLKGP DSHYGTGKLKVVHETPAASKTVFFFSPPGNNGTSIEDGQIP EIIFFYT |
| 6924 | 2210 | 1235 | PEERVICFVEYYLTAHGRKALAKKPYNPITIGETFFHCSWEVP KDRVKPKRTASRSPASCHEHPMADDPKSKYKLRFAEQVSHHPP ISCFYCECEKRLCVNTHVWTKSKFMGMSVGVSMIGEVLRLLLE HGEEYVFTLPSAYARSILTI PWVLGCKVSINCAKTGYSATVIF HTKPFYGGKVHRVTAEVKHNPTINTIVCKAHGEWNGTLEFTYNG ETKVIDTTLFPVYPKKIRPLEKQGPMEARNLWREVTRYLRGLDI DAATEQKRHLEEKQVREERKRENLRTPWKPKYFIQEGDGSGLIQ SPLESTLMGLEVQSFPV |
| 6925 | 2 | 1653 | RGGAAGAAMEPDSVIEDKTIELMCSVPRSLWLGCANLVESMCAL SCLQSMPSVRCLQISNGTSSVIVSRKRPSEGNYQKEKDLCKIYF DQWSESDQVEFVEHLISRMCHYQHGHIINSYLPMLQDFITALP EQGLDHAENILSYLDARSLCAELVCKEWQRVISEGLWKKLI ERMVRTDPLWKGLSERRGWDQYLFKNRPTDGPSPNSFYRSLYPKI IQDIETIESNWRCGRHNLRICRSENSKGVYCLQYDDEKISG LRDNSIKIWDKTSLECLKVLGTHTGSVLCQYDERVIVTGSSDS TVRVWDVNTGEVNLTIHNEAVLHLRFNGLMVTCSKDRSIAV WDMASATDITLRRVLVGHRAAVNVVD FDDKIIVSASGDRTIKW STSTCEFVRTLNGHKRGIAQLQYRDLVVGSSDNTIRLWDIEC GACLRVLEGHLEELVRCIRFDNKRIVSGAYDGKIKVWDLQAALDP RAPASTLCRLTLVEHSGRVFRLQFDEPQIISSSHDDTLIWDFL NVPPSAQNETRSPRTYTYISR |
| 6926 | 1 | 733 | SGRVAMDGLGLQFPFEGFPAGPPLPPLPHMGHGYRDCQSLGAPPL |

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|------------|--|--|--|
| | | | DGYPLPTPDTSPLDGVDPPDAFFAAPMPGDCPAAGTYSYAQVSD YAGPPEPPAGPMHPRLGPEPAGPSIPGLLAPPSALHVVYAGMS PGAGGGRGFQMQPQHQQHQQHQQHPPGPGQPTPPPEALPCRDGT DPSQPAELLGEVDRTFEFEQYVLFVCKPEMGLPVQGHDSGVNLPD SHGAISSVVS DASSAVVYCNYPDV |
| 6927 | 2 | 1484 | LTLCGDIQLMLAQNANNRAHLEEFHYQTKEDQEILHSLHRESS CQGFATWDLSTDLSQLSVSCCKCYEAANBILQFRDLKSNQNEH YVQVLKRMGNIRNEIGVFYMNQAAALQSERLVSKSVSAAEQQLW KKSFCFEKGIHNFESIEDATNAALLCNTGRLMRICAAHCGA GDELKREFSPEEGLYINKAIDVYLKALRSLGTRDIHPAVWDSVN WELSTTYFTMATLQDDYAPLSRKAQEQTKEVSEAMMKSLEYCD VDSVSARQPLCQYRAATIHRLASMYHSCLRNQVGDHLRQHR VLADLHYSKAAKLFQLLKADAPCELLRVQLERVAFAEFQMTSQNS NVGKLKTLGALDLMVRTEHAFQLIQKELIEFEGQPKSGDAAA ADASPSLNREBVMKLLSIFESRLSFLLLQSIKLLSSTKKTSNN IEDDTILKTNKHISQLLRATANKTATLLERINVIVHLLGQLAA GSAASSNAVQ |
| 6928 | 1086 | 777 | EADLINNLLQVKMRKRYSDKTLSPWLQDYQTWLDLRELECK IGERYITHESDDLREWEKYAGEQGLQYPTHLINFSASHSDTPETE ETEMKALGERVSIL |
| 6929 | 1749 | 607 | RDQGRYRDRSPAREPGDVSARTSGGGGGRSATTAMPPFPVNG NLHQHDPQDLRHNGNVVAGRPSCSRGPRAIQKQPAGGRRSG RGPAAGGLCLQPPDGGTCVPEEPPVPMDEALEKHLAQLQFRE QEVNRQGGARTNSTSAQKNERESIRQKLAGSFFDDGPGIYTSC SKSGKPSLSSRLQSGMNLQICFVNDSGSDKSDADDSTKETSLO TPLSPMSKQSSSYSDRDTTEESSESLDDMDFLTRQKQLQAEAKM ALAMAKPMAMQVEVEKQNRKKSFPVADLLPHMPHISECLMKRSL KPTDLRDMTIGQLQVIVNDLHSQIESLNEELVQLLLIRDELHTE QDAMLVDIEDLTHAESQKHKMAEKMPAK |
| 6930 | 131 | 545 | FKDTANVFVSLFQMRNNFRHYFIEPSQLKLEYDVITWITQVAI SYTVVPFVLLSIKPSLTFYSSWYICHLILGILVLLLPVKKTQR RKNTHENIQLSQSKKFDGENSLGQNSFSTNNVCNQNEIASR HSSLKQ |
| 6931 | 2 | 659 | FVERLPNRPACLLVASGAAGVSAQSFLHCFTMASTAFNLQVAT PGGKAMEFVDVTESNARWVQDFRLKAYASPAKLESIDGARYHAL LIPSCPGALTDLASSGSLARILQHFHSES KPICAVGHGVAALCC ATNEDRSWVFDSSYSLTGPSVCELVRAFGFARLPVVEFVKDGG ACFSASEPDVAHVVLDRHLVTGQNASSTVPAVQNLLFLCGSRK |
| 6932 | 2 | 1131 | FVDSPGQGEQAEIEEGGIQMNMRRAHSPAEGASVESSSPGPKK SDMCEGCRSLAAGHPGYISHDKETSIKYVSHQHPHQPQLFSIVR QACVRSLSCEVCPGREGPIFFGDEQHGPFVFSHTFFIKDSLARGF QRWYSIITIMMDRIYLINSWPFLLGKVRGIIIDELQKALKVFEA EQFGCPQRAQRMNTAFTPFLHQRNAGNARSLSLTSSDDNLWACL HTSFAWLLKACGSRLEKLEGAFTEDTLVQMEKLADLEESES WDNSEAEEEEKAPVLPSTEGRELTQGPAAESSLSGCGSWQPRK LPVFKSLRHMROVGGRTAHHELRRRANHGLCLPTRLASGPSTL KTLQEVTDLSLGGWLMAGQVGGII |
| 6933 | 1431 | 890 | SLNLHCTLPFPFHQYFAGYPSDKKPKGQSKQPSGTTKRPI SDDDCPSASKVYKASDSAAEAEAFQLTPQQHLLIREDCQNQKLW DEVLSHLVEGPNFLKKLEQSFMCVCCQELVYQPVTECFHNVCK DCLORSFKAQVFSCPACRHDLGQNYIMIPNEILQTLDDLFFFGY SKGR |
| 6934 | 3030 | 2588 | DRDHSQCGGIRRVALARVSSVKLISKAKIRTVKMTPIIVLAFIV CWTPTFFVQMWVSDANAPKEASAFIIVMLLASLNSCCNPWYIM LFTGHLFHELVRFLCCSASYLKGRRIGETSASKKSNSSSFVLS HRSSSQRSQSPSTA |

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|------------|--|--|---|
| 6935 | 886 | 543 | NSALYVAGGNDGTSCLNSVERYSPKAGAWESVAPMNIRRSTHDL VAMDGWLYAVGCGNDGSSSLNSIEKYNPRNTKNVAASCMTFRSS VGVAVLELLNFPPSPPTLSVSSTSL |
| 6936 | 1347 | 567 | RSHRRQFLSRALLEFFGKSHPPPHRLFRKSLNVGLHYSHIPFLT TCLHFLRKRRLQKGEVGLSVETSKPQVPVGGLSRKKVPQEPWATV MEKRLQEAQLYKEGNQRYREGKYRDAVSRYHRALLQLRGLDPS LPSPLPNLGPQGPALTPEQENILHTTQTDCCYNLAACLLQMEPV NYERVREYSQKVLERQPDNAKALYRAGVAFHQLQDYDQARHYLL AAVNRQPKDANVRRYLQLTQSELSSYHRKEKQLYLGFMFG |
| 6937 | 1 | 727 | AVEFRCCPGRPACFARGWRDLRVYGTCTCDQACRFTGDCCFDY DRACPARPCFVGEWSPWSGCADQCKPTTRVRRRSVQQEPQNGGA PCPPLEERAGCLEYSTPQQQDCGHTYVPFITTSFKNKERTROA TSPHWSHTEDAGYCMFETESLTPHCALENRPLTRWMQVLRG YTVCVDCQPPAMNSVSLRCSGDLSDGNQTLHWQAIGNPRCQG TWKKVRRVDQCSCPAVHSFIFI |
| 6938 | 3 | 719 | NSRKLLEAERVDTDFMQLKRRQSEKENDSGTLDTVGAVVVVDH EGNVAAAVSSGGLALKHPGRVGAALYGCWCWAENTGAHNPYST AVSTSGCGEHLVRTLARECSHALQAEDAHOALLETMQNKFISS PFLASEDGLGGVIVLRSCRCSEAFDSSQNKQTLLEFVLSHTT ESMCVGYMSAQDGKAKTHISRLPPGAVAGQSVAIIEGGVCRLEP SELTLQAECEASQRHFRF |
| 6939 | 3 | 810 | KVTAPRRPQRYSSCHGSDNSSVLSGELPPAMGRTALFHHSGGSS GYESLRDRSEATGSASSAPDSMESGASPGARTSLKSPKKRA TGLQRRLIPAPLEDTTALGRKPSLPQGWDLPPPLAGSLKEPF EIKVYEIDDERLQRPRTPREAPTQGLACVSTRRLAERRQQR LREVQAKHKLCEELAETQGRMLLEPGRWLEQFEVDPELEPESA EYLAALERATAALEQCVNLCKAHVMMVTCFDISVAASAAIPGPQ EVDV |
| 6940 | 1188 | 496 | GKMAAQPLRHRRCATPPRGDFCGGTERAIDQASFTTSMENDTQ VVKGSSPLPAGLGAEEPAAGPQLPSWLQPERCAVFCQAQCHAV LADSVHLAWDLRSRLGAVVFSRVNTNNVLEAPFLVIGIEGSLKGS TYNLLFCGSCGIPVGFHLYSTHAALALRGHFCLSSDKMVCYLL KTXAIVNASEMDIQNVPLSEKIAELKEKIVLTHNRLKSLMKILS EVTPDQSKPEN |
| 6941 | 1 | 713 | SLSRADSDPHGPHTCGHVLNVIIGSNVLALEAQRQAEALGYQA VVLSAAMQGDVKSMAQFYGLLAHVARTRLTPSMAGASVEEDAQL HELAAELQIPDLQLEEALETMAWGRGPVCLLAGGEPTVQLQSGG RGRNOELALRVGAELRRWPLGPIDVLFSLGGTDGQDGPTAAG AWVTPELASQAAAEGLDIATFLAHNDSHTFFCCLQGGAHLLHTG MTGTNVMDTHLLFLRPR |
| 6942 | 1 | 246 | GDYVERYDPKTDWTMGAPLSMPTNAVGGCLLGDRLYADGGYDG QTYLNTMESYDPQTNWTQMASLNIGRAGACVVVIKQP |
| 6943 | 1 | 739 | PMATGDGAKTLAIHVKALTADSIRITWKATLPASSFRLSWLRIG HSPAGGSITETLVQGBKTEYLLTALEPKPTYIICMVTMETTNAY VADETPVCAKAETADSYGPTTTLNQEQONAGPMASLPLAGIIGGA VALVFLFLVLGAICWYVHQAGELLTRERAYNRGSRKKDDYMESG TKKDNSILEIRGPGLQMLPINPYRAKEEYVVHTIFPSNGSSLCK ATHTIGYGTTRGYRDGGIPDIDYSYT |
| 6944 | 960 | 156 | VANILLNGVKYSELTGSSERAEQPLSVGRCLSTICNMPKALRT LCVNHFLGWLSFEGMLLFYTDPMGEVVFQGDPAKHTSEAYQKY NSGVTMGCWGMCIYAFSAAFYSAILEKLEEFSLVRLTYFIAYLA FGLGTGLATLSRNLVVLSCITYGILFSTLCTLPYSLLCDYYQ SKKFAGSSADGTRRGMGVDISLLSCQYFLAQILVSLVLGPLTSA VGSANGVMYFSSLSVFLGCLYSSLFVIYEIPPSDAADEHRPLL LNV |

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|------------|--|--|--|
| 6945 | 2067 | 179 | EGEDRGLPRTMGAALGTGTRLAPWPGRACGALPRWTPTAPAQGC HSKPGPARPVPLKKRGYDVTRNPHLNKGMFTLEERLQLGIHGL IPPCFLSQDVQLLRIMRYERQQSDLDKYIILMTLQDRNEKLFY RVLTSDEKFMPIVYTPVGLACQHYGLTFRPRGLFITIHDKG HLAATMLNSWPEDNIKAVVVTGGERILGLGLGCGYGMGIPVKGKLA LYTACGGVNPQQCLFVLLDVGTNNEELLRDPLYIGLKHQVRHKG AYDDLDEDFMQAVTDKFGINCLIQFEDFANANAFRLNKNYRNKY CMFNDDIQGTASVAVAGILAAALRITKNKLSNVHFGFQAGAEAM G\IAHLLVMALE\KEGVPKA\EATRKIW\MVDF\KGLIVQGRDH LNHKEKEMFAQD\HPEVNSLEEVVRLVKPTAIGVAAIAEA\FTE QILRDMASFHERP\IIFALSNPTSKAECTA\EKCYRVTEGPRGF FAS\GSPF*GVLIWEMGKTFIPGGRGNNA*RVPRGWQLGVHSPG GDPGHIP\DEIFLPDSRAKLPQEVSEQHLSQGRLYP\PLST\IR NVFLRIAIVKVD*GYKHNLV\SYYPEPKD\KEAFCKIPGSGYTPD YDSFYT/VDSYIWAQKAMNVQTV |
| 6946 | 133 | 2551 | SCHEYSGITVAPGDCPGVAHLAPSMASDTPESLMALCTDFCLR NLDGTLGYLLDKETLRRLHPDIIFLPSEI\CDRLVNEYVELVNAAC NF\EPHE\SPFNPLFRDPRKQPASRIHL\RED\LVQD\QD\LE AIRKQDL\VEL\YLTN\CEKLSAKSLQTLRSFSHTLGVP*AFFG C\TNILLRKRKNPGL/CEDEYLEFNPTCQVLVKDFTFEGFSRLR F\LKLRGMDWVPVES\LLRPLNSLAALDLSGIQTSDDAA\PLTQ WKDSL\VSLLV\YNMDSDDHII\VIQHLKRLHLDISRDLSS YYKFKLTREVLSLFVQKLGNLMSLDISG\HMLENCISISKIGKR EAGQTSI\EPSK\SSIIIPFRGFEGLPQF\LGVF*GIFCGRLTH IPAYKVSQDKNEEQVLNAIEAYTEHRPEITSRAINLLFDIARIE RCNQLLRALKLVIITALKCHKYDRNIQVTGSAAFLYLTNSEYRSE QSVKLRQVIQVVLNGMESYQEVTVQRNCCLTLCNFSIPEEFEL QYRRVNEILLSILNPTQDESQRIAVHLCNALVCQVDNDHKEA VGKMGFVVTKLTKQKLLDKTCDQVMEFSW\SALWNITDETPD NCEMFLNFMGMKFLDCLNEFPEKQELHRNMLGLGNVAEVEL RPQLMTSQFISVFSNLLSKADGIEVSYNACGVLSHIMFDGPEA WGVCEPQREEVEERMWAAIQSWDINSRRNINYSFEPILRLLPQ GISPVSQHWATWALYNLVSVYPDKYCPLLIKEGGMPLLRDI IKM ATARQETKEMARKVIEHCNSNFKEENMDTSR |
| 6947 | 2 | 1682 | TSVSTIPRGLASARPQSRSWRCCPVWRRSPGRARGRLKMLNVP SQSFPAPRSQQRVASGGRSKVPLKQGRSLMDWIRLTKSGKDLTG LKGRLEIEVTEBELKKNKDDCWICIRGFVYNVSPYMEYHPGGE DELMRAAGSDGTDLFDQVHRWVNYESMLKECLVGRMAIKPAVLK DYREEKKVLNGLPKSQVTDTLAKEGPSYPSYDWFQTDLSVTI /EHIY*TEGYQFRLNNS*SSE*FLYSRNNY*GLLISYTYW/R*A MRFRKIFLCGL/CESVGKIEIVLQKKENTSWDFLGHPLKNHNSL IPRKDTGLYYRKQCLISKEDVTHDTRLFCMLPSTHLPVPIGQ HVYLKLPITGTEIVKPYTPVSGSLLSEFKEPVLNNKYIYFLIK IYPTGLFTPELDRLQIGDFVSVSSEPNFKISKFQLEDLFLA AGTGFTPMVKILNYALTDIPSLRKVKLMFVNKTEDDIWRSQLE KLAFLDKRLDVEFVLSAFISEWNGKQGHISPLLSEFLKRLNLDK SKVLVLCICGPVPFTEQGVRLLDLNFNFKNEIHSFTA |
| 6948 | 104 | 58 | PDGAHSFFPDDEYFTCSSLCLSCGVGCKKSMNHGKEGVPHAKSR CRYSHQYDNRVYTCACYERGEESVVPKTSASTDSPWMGLAKY AWSGYVIECPNCGVYRSRQYWPGNQDPVDTVVRTEIVHVWPGT DGFLKDNNAQRLDGMNFMASQSVSELSLGPTKAVTSWLTQI APAYWRPNSQILSCNKCATSFKDNDTKHHCACGEGFCDSCSSK TRPVPERGWGPAPVRVCDNCEYAR/TRPVSCYRGTSGR*RRRRT QETVE |
| 6949 | 152 | 4656 | GLRLCLSRPLTRPGDDSVGGSAMASGAGGVGGGGGKIRTRRCH QGPIKPYQQRQQHGGILSRVTESVKNIVPGWLQRYFNKNEDVC |

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|------------------|---|--|---|
| | | | <p>SCSTDTSEVPRWPNKEDHLVYADESSNITDGRITPEPAVSNT EEPSTTTAST\YPDVLTRVSLYRSHLNFMSLESPALHCQPSST SAFFIGSSGFLVKEIKDSTSQHDDNISTTSGFSSRASDKDIT VSKNTSLPLWSPEAERSHLSQHTATSSKKPAFNLSAFGTLSP SLGNSSILKTSQGLDSPFFYPGKTTYGGAAAARQSKLRNTPYQA PVRQMKAKQLSAQSYGVTSSTARRILQSLKMSPLADAKRIP SIVSSPLNSPLDRSGIDITDFQAKREKVDQYPPVQRLMTPKPV SIATNRSVYFKPSLTPSGEFRKTNRIDKKCTGYEKNMTPGQN REQRESGFSPNPSLPAANGLSSGVGGGGKMRERRHAFVASKP LEEEEMEGPVLPKISLPIITSSSLPTFNFSSEIITSSSPSPINSS QALTNKVMTPSPSTGSPMFKFSSPIVKSTEANVLPPSSIGFTF SVPVAKTAEGLSGSSSTLEPIISSAHVTTVNSTNCKKTPPEDC EGPFRPAEILKEGSLVDILKSPGFASPKIDSVAAQPTATSPVY TRPAISSFSSSGIGFGEGLKAGSSWQCDTCLLQNKVTDNKCIC QAALSPRDTAKQTGIEPTNKSQKTTLSASGTGFGDKFKPVIGT WDCDTCLVQNKPEAIKCVACETPKPGTCVKRALTLTVSESAET MTASSSSCTVTTGTLGFGDKFKRPIGSEWCVCCVSNNAEDNKC VSCMSEKPGSSVPTSSSSTVPSLPSGGSLGLEFKPKPEGIWD ELCLVQNKADSTKCLACESAKPGTKSGFKGFTSSSSSSNSAASS SFKFGVSSSSSGPSQTLTSTGNFKFGDQGGFKIGVSSDSGYINP MSEGF*FSKHIVGFKFGVSSSEKPEEVKDKSKDNFKGLSFG SNPVFLTPFGVSNLQGEKKEELLKSSCAGFRFGTGVINSTR VPANTIVTSENKSSFNLGTIETKSVSVAPLKCTSEAKKEEMPA TKGGFSFGNVFASLPASVFLGRTEEKQEPVTSTSLVFGEG KLTMKEPKC\QPVFSFGFQRQTKDENSSKSTFSFMTKPSKE SEQPAKATFAGAQTNNTADQGAAPDLNNSSSSSSTPAT AGGG\IFGSSTSSSNPPVATFVFGQSSNPGSS\AFGNTAESST SQSLLSQDSKLATTSTGTAVTPPVFGPGASSNNTTSGFGFG ATTSSSAGSSFFVGTGPSAPASAPAGANQPTFGQSQGASQP NPPGFGSISSTALFPTGSGPAPPTFGTVSSSQPPVFGQGPSQ SARGSGTTPNSSAFQFGSSTTNFTNNSPSGVFTFGANSSTP AASAPSGSGGFFPNQSPAFTVGSNGKNVFSSSGTSFSGRKIK TAVRRRK</p> |
| 6950 | 2585 | 411 | <p>PRPGSRSGLCRRAGERGAVRAGGLSRRTAE*IMDELHYQDTS DVPEQRDSKCKVWTHEEDEQLRALVRQFGQDQWKLASHFPNR TDQCCQYRWLRVLNPDLVKGPWTKEEDQKVIELVKYGTQWTL IAHLKGRGLGKQCRERWHNHLNPEVKKSCWTEEDRIICEAHKV LGNRWAEIAKMLPGRTDNAVKNHWNSTIKRKVDTTGGFLSESKDC KPPVYLLLELEDKDLQSAQPTGQGSLLTNWPSVPTTKEEN SEELAAATTSKEQPIGTDLDAVRTPEPLEEFPKREDOEGSP ETSLPYKWVVEANLLIPAVGSSLSALDLIESDPDAWCDLSKF DLPEEPSAEDSINNSLVQLQASHQQVLPFRQPSA\LVPSVTEY RLDGHITISLRSRSGELIPISPSTEVGGSGIGTPPSVLKRQRK RRVALSPVTENSTLSFLDSCNSLTPKSTPVKTLFFSPSQFLNF WNKQDTLELESPLTSTPVCSSQKVVTTELHRDKTPLHQKHA VTPDQKYSMDNTEHTPTFFKNALEKYGLKPLPQTPLHEEDLKE VLRSEAGIELYIEDDIRPEKQKRKPLRRSPIKKVRKSLALDIV DEDMKLMSTLPKSLSLPTTAPSNSSSLTSGIKEDNSLLNQGF LQAKPEKAABAQKPRSHFTTAPMSSAWKTVACGTRDQLFMQE KARQLLGRKPSHTSRTLILS</p> |
| 6951 | 1940 | 239 | <p>AGPDDTMKRSLLQALYCOLLSFLILALTEALAFIQEFPSPRESL QVLPSTPGTTPGTMTAPHSSTRHTSVVMTLPNPDGPPSQAAAPMA TPTPRAEGHPPT\TPSPPSLRQ*PPILKAP/SSTGPAPAMAT TSSKPEGRPRGQAAPTILLTKPPGATSRPTTAPRTTTRRPPRP PGSSRKAGAGNSRPVPPAPGGHRSRKEGORGRRNPSTPLGQKRP LGKIFQIYKGNFTGSEPEPSTLTPTPLWGYSSSQPQTVAAT</p> |

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|------------|--|--|---|
| | | | <p>TVPSNTSWAPTTSLSLGPADKPKGLRRAAQGGSTFTSQGGTPDA TAASGAPVSP/PSCPSAFSAPPFR*PTGWQP*LLAYCYP\CT SRPLSTSSGVFTAAATGPTPAAFDTSVSAPSOGLPQASTTPQAP THPSRVSESTISGAKETVA\FSP*PTGCPVLSQWYPPQQAIS STAWSPPGPGSLGQQGTSPMWRGTNRSTEPSSA*ARWISPG*S WPSACPSPP/LCPADGVLHEEEEDRQPGEQPEAYGNNTTHPGT TFQAC\RGAAPEIPVPLKPLRTQLSEPRSPANGDYRDTGMVPC</p> |
| 6952 | 658 | 304 | <p>PESEGESGEMTDRTYTHSQLEHLQSKYICT\ATPTPPSGSG\CE PTPRLVLLHGLRPSQLLRHCGE*EQSASPLQDGDASALWT ASRQARGELRLCLTTAVRGTSPPSVSPVCQSS</p> |
| 6953 | 1512 | 349 | <p>NWGTKTRALASGKHVFPFGKQTNPNKS/VHCDG*G**RRETTODES FSPHFRGKMGVV\KLEKELENTQPVGGNEG*EHEVTGNLNSD PLLELCQCPLCQLDCGSREQLIAHVYQHTAAVVSAKSYM\CPVC GRALSSPGSLGRHLIHSDEQSRNCAVCGARFTSHATFNSEKLP EVLNMSLPTVHNEGSSAEGKDIAFSPFVYPAGILLVCNNCAA YRKLEAQTPSVRKWLRRQNEPLEVRLQRLERERTAKKSRDN ETPEEREVRMRDRDRAKRLQRMQETDEQARRLQDREAMRLKR ALETPEKROARLIREREAKRLKRRLEKMDMLRAQFGQDPSAMA ALAAEMNFFQLPVSGVELDSQLLGKMAFEEQNSSSLH</p> |
| 6954 | 819 | 1 | <p>PPPPFIIPSHPREAGT*AG*KRSGDSECSFVEQ*A*TRAAQN *PQR*RWTEGNSPOASAVATPGQGASPAAPRCTP*PSRRHRLP PGARPPAG*AAPAPT*PWLAPASAPQPGAPLSPAPPLIRTR *CAGAAARGRPDRDRSPRPTPGGCSWSEPRTPPAVSASAQTPS DAG*AGGR*GQRQRPSTGR*PPGVGGAGRSRRREGTIPGNPHPR AS*RAGWQR*PGP/REWGL*EPQGEEMSGPGGPGAPPNQVGSS VMQAMSTGI</p> |
| 6955 | 1968 | 782 | <p>PPGRQVRAQVAGAPVGHGTRARQVKTGRRRRARRTMFFLGQD WRSPGWSWIKTEDGWKRCECSQKLERENNHCNISHSIILNSED GEIFNNEEHEYASKKKKDHFRNDTNTQSFYREKWIYVHKESTK ERHGYCTLGEAFNRDLFSSAIQDIRRFNYVVKLLQLIAKSQTS LSGVAQKNYFNILDKIVQKVLDDHHPRLIKOLLQDLSTLCIL /N*RSREVCISGKHQYLDLPIRNYRSLATTATGSSDD*ASENG LTLSDLPLHMLNLIYRPSDGDWIIITLGQVTPPLYMLSEDRQLW KKLCQYHFAEKQFCRHLILSEKGHIEWKLMYFALQKHYPKEQY GDTLHFCRHCSILFWKDSGHPCTAADPDSCFTVSPQHFDLFK F</p> |
| 6956 | 8605 | 3839 | <p>QTSTSIASPTSPVVLGESVLQDNSFDLNNGSDAEQEEMETQSS DFPPSLTQAPDQSSSTIQLHPATSPAVSPTTSPAVSLVVSAAAS PEISPEVCPAASTVVSFAVSVVSFAVSLVPLTASV TSPKASPVTSPAAAFPTASPANKDVSSFLETADVEEITGEGLT ASGSGDVMRRRIATPEEVRLPLQHGWRREVRIKKGSHRWQGETW YYGPCGKRMKQFPEVIKYLNRNVVSVRREHFSFSRMPVGDFF EERTPEGLQWVQLSAEEIPSRQAITGKRGRPRNTEKARTKEV PKVKRGRGRPPKVKITELLNKTDNRPLKLEAQETLNEEDKAKI AKSKKMRQKVORGEQCTTIQQAARNKRQETKSLKQKEAKKS KAEKEGKTKQEKLEKVKREKKEKVKMKEKEEVTAKPACKAD KTLATQRRLEERQRMILEEMKKPTEDMCLTDHQPLPDFSRVP GLTLPSGAFSDCLTIVEFLHSFGKVLGFDPAKDVPSLGVLOEGL LCQGDSLGEVQDLLVRLKAAHDPGFPSYCQSLKILGEKVSEI PLTRDNVSEILRCFLMAYGVEPALCDRLTQPPQAQPPQQAAS LAFVHVLNGSTLIINEIDKTLESMSYRKNKWIIEGRLRLKT VLAKRTGRSEVEMEGPEECLGRRSSRIMEVTSMEEEEEESI AAVPGRRGRDGEVDATASSIPELERQTEKLSKQQLFFRKLLH SSQMLRAVSLGQDRYRRRYWVLPYLAGIFVEGTGNLVPEEVIK KETDSLKVAHAASLNPALFSMKMELAGSNTTASSPARARGPRK</p> |

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|------------|--|--|--|
| | | | TKPGSMQPRHLKSPVRGQDSEQFQAQLQPEAQLHAPAQPQPQLQ LQLQSHKGFLEQEGSPSLGQSQHDLSSQAFLSWLSQTQSHSSL LSSSVLTDPSSPGKLDPAQSPPEEPDEAESSPDPAQWLFNI SAQMPCNAAPTPPAVSEDPQTPSPQQLASSKPMNRPSAANPCS PVQFSSTPLAGLAPKRRAGDPGEMQSPPTGLGQPKRRGRPPSKF FKQMEQRYLTQLTAQPVPPMCSGWWIRDPEDMLDAMLKALHPR GIREKALHKLHNRDPLQEVCLRPSADPIFEPRQLPAFOEGIM SWSPKEKTYETDLAVLQWVEELEQVRVMSDLQIRGWTCPSPDST REDLAYCEHLSDSQEDITWRGRGREGGLAPQRKTNTPLDLAVMRL AALQNVERRYLRPLWPTHEVLEKALLSTPNGAPEGTTTETIS YEITPRIRVWRQTLECRSAAQVCLCLGQLERSIAWEKSVNKVT CLVCRKGDNDEFLLCDGCDRGCHYCHRPKMEAVPEGDWFTCV CLAQVEGEFTQKPGFPPKRGQKXKSGYSLNFBEGDGRRRRVLLR GRESAAGPRYSEEGLSPPKRRRLSMRNHSDLTFCETILMEME SHDAAWPFLEPVNRLVSGYRRIIKNPMDFSTMRELLRGGYTS SEEFADALLVFDNCQTFNEDDSEVKGAGHIMRRFFE\SRWEEF YQGKQGSVRQGRWGVTLWHLPTPTQTKTCHFHLLMLPWWQTVQ RYNPDF |
| 6957 | 82 | 3514 | HLIVAMPEPTKKEENEVPAPAPPEEPESKEKEAGTTPAKDWTLV ETPPGEEQAKQANANSQLSILFIEKPQGGTVKVGEDITFIAKVKA EDLSEKPTINGSRKWMDLASKAGKHLQLKETFERHSRVYTFEMQ IIKAKDNFAGNYRCEVTYKDKFDSCTFLEVHESGTTPNIDIR SAFKRSGEQEDAGELDFSGLLKRRVKKQEEEPQVDVWELLKN TKPSEYEKIAFQVSEPTCSGMLKRLKRSIREKKSAFAKILDP VYQVDKGGVRVFVELADPKLEVKNKNGQELRPSTKYIFEDTR CQSI LNIDNCQMTDDSEYVVTAGDEKSTELLVREPPIMVTQKL EDTIDYCGERVELECEVSEDDAQVKNFKNGEEIILVQTRYRIRV EGKKHILIEGATKADAADYSVMTTGGQSSAKLSVDLKLKILT PLTDQTVNLGKEICLKCEISENIPGKWTNGLPVQESDRLLKVH KGRIHLKVIDHALTEDEGDYVFPADAYNVTLPKAVHVIDPPKII LDGLDADNTVTIAGNKLRLLEIPISGEPPPKAMWSRGDKAIMEG SGRIRTESYPPDSSTLVIDIAERDDSGVYHINLKNEAGEAHASIK VKVVDFFDPPVAPTVTBVGDDWCIMNWEPPAYDGGSPILGYFIE RKKKQSSRWMLNFDLCKETTFEPKMMIEGVAYEVRIFAVNA\I GISKPSMPSRPFVPLAVTSPTLLTVDSTDTVTMRWRPPDHI GAAGLDGYVLEYCFEGSTSAKQSDENGEAAYDLPAEDWIVANKD LIDKTKFTITGLPTDAKIFVRVKAVNAAGASEPKYYSQPILVKE IIEPPKIHSPKHLKQTYIRRVGDRVILVIFPGQKPRELTKWCD GAEIDKNQINIRNSETDTIIFIRKAERSHSGKYDLQVKVDKFVE TASIDIRIIDRPGPPQIVKIEDVWGRNVALTWTTPKDDGNAAIT GYTIQKADKKSMELRVIEHIIIEVPVPHTELIGNEYFRVFSN MCGLSDATMTKESAVIARDGKIYKNPVYEDDFSEAPMFTQPL VNRLCHSGYMATLNCSSVRGNPKPKITWMKNKVAIVDDPRYRMFS NQGVCLEIRKPSPYDGGTYCCKAVNDLGTVEIECKLEVKVIAQ |
| 6958 | 274 | 1663 | PRTSRVKTEGSGSSAMDFSVKVDIEKEVTCPICLELLTEPLSL DCGHSFCQACITAKIKESV IISRGESSCPVCQTRFPQGNLRPNR HLANIVERVEKVKMSPOEGQKRDVCEHHGKKLQIFCKEDGKVIC WVCELSQEHQGHQTFRINEVVKECQEKQLVALQRLIKENQEAEX LEDDIRQERTAWKNYIQRQKILKGFNEMRVILDNEEQRELOK LEEGEVNVLDNLAAATDQLVQQRQDASTLISDLQRRLRGSSVEM LQDVIDVMKRSSEWTLKKPKSVSKKLKSVFRVPDLSGMLQVLKE LTDVQYYWVDVMLNPGSATSNAIVSDQROVKTVRTCTFKNSNP CDFSAFGVFGCQYFSSGKYWEVDVSGKIAWILGVHSHKISSLNK RKSSGFAFDPSVNYSKVYSRYRPQYGYWVIGLQNTCEYNAFEDS SSSDPKVLTLMFAV\LPVVLGFS |
| 6959 | 1 | 1469 | SLVHVVEFGRGIEDFPYLFQLTCCQQRICSVTQAGVQWCDHSS |

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|------------|--|--|--|
| | | | LQPQTGFLNQSSHLSSLSSRDYRMLSSFNWFQDRFWLPPNVWT WTELEDGRVYPHPQDLLAALPLALVLLAMRLAFERFIGLPLS RWLGVRDQTRRQVKPNATLEKHFLTEGHRPKEPQLSLLAAQCGL TLQQTQRWFRRRNRQDRPQLTKKFCEASWRFLFYLSFVGGLSV LYHESWLWAPVMCWDYRPNQLTLSCPAADSEA\SLYWWYLLLELG FYLSLLIRLPFDVKKRGGGSSIKPRPHYDPPSTA\DFKEQVIH HFVAVILMTFSYSANLLRIGSLVLLHDSDDLLEACKMVNMQ YQQVCDALFLIFSVFFYTRLVLPFTQILYTTYYESISNRGPF GYFFNGLLMLQLLHVFWSCILRLMYSFMKKGMKEDIRSDV EESDSSEAAAAQEPLQLKNGTAGGPRPAPTGGPRSRVAGRLTN RHTTAT |
| 6960 | 387 | 2068 | AKWAEKEMQEF\TRSF\RGPRDLSTLTHSVRRRYLAHSGRS HLEPEEKQALKRLVEEPLKMQVDEASRBKDLDTKKGRPPT PCSDPERKRRFRNSESSESGSEASSPDYFGPPAKNGVASRSTHP KEENPRRA\SKAVESSDEERQDLPQORGESESEEEKGYKKG TRKKPVVKQAPGKASVSRKQAREESESEAEVQRTAKKVEGN KGTSLKESQSESEEEILAKKKEQRESEVEEKEEDEKGDWK PRTRNGRRKSAREERSCKQKSAKRLLGDSSEEEQKEAASSG DDSGRDREPPVQRKSEDRTQLKGGKRLSGSSEDEDSGKGPTA KGSRKMARLGSTSGEESDLEREVSDEAGGPPQGERKNRSSKKS SRKGRTRSSSSSDGSPKAGGKAGSGRRGEDHPAVMRLKRYIR ACGAHRNYKKLLGSCSHKERLSILRAELEALGMKGTPSLGKCR ALKEQREEAEEVASLDVANIISGSGRPRRTAWNPLGEAAPGGE LYRRTLDSDEERPRPAPPDWSHMRGISSDGEEN |
| 6961 | 340 | 1646 | RPWSSPTMKPNFSLRLRIFNLNCWGIPTLSKHRADRMRLGDFL NQESFDLALLEEVWSEQDFQYLRQKLSPTYPAHHFRSGIIGSG LCVFSKHPIQELTQHIYTLNGYPYMIHGDWFSKAVGGLLVHL SGMVLNAYVTHLHAENRQKDIYLAHRVAQAWELAQFIHTSKK ADVLLCGDLNMHPEDLGCCLLKEWTGLHDAYLETRDFKGSEEG NTMVPKNCYVSQQLKFPFPGVRIDYVLYKAVSGFYISCKSPET TTGDPHRTPLSDHEALMATLFVRHSPQONPSSTHGP\AERS PL/MCVCLKEALDGSGLGMA\QARWWA\TFA\SYVIGLGL\LL LALLCVLAAGGGAGEAAILLWTPSVGLVLWAGAFYLFHVQEVNG LYRAQAELOHVLGRAREAQDLGPEPQLYALL\LGQOEGDRTKEQ |
| 6962 | 340 | 1646 | RPWSSPTMKPNFSLRLRIFNLNCWGIPTLSKHRADRMRLGDFL NQESFDLALLEEVWSEQDFQYLRQKLSPTYPAHHFRSGIIGSG LCVFSKHPIQELTQHIYTLNGYPYMIHGDWFSKAVGGLLVHL SGMVLNAYVTHLHAENRQKDIYLAHRVAQAWELAQFIHTSKK ADVLLCGDLNMHPEDLGCCLLKEWTGLHDAYLETRDFKGSEEG NTMVPKNCYVSQQLKFPFPGVRIDYVLYKAVSGFYISCKSPET TTGDPHRTPLSDHEALMATLFVRHSPQONPSSTHGP\AERS PL/MCVCLKEALDGSGLGMA\QARWWA\TFA\SYVIGLGL\LL LALLCVLAAGGGAGEAAILLWTPSVGLVLWAGAFYLFHVQEVNG LYRAQAELOHVLGRAREAQDLGPEPQLYALL\LGQOEGDRTKEQ |
| 6963 | 374 | 2618 | RVTPLILKLLKKPKTAENQKASEENEITQPGSSAKPGLPCLNF EAVLSPDPALIHSTHSLTNSHAHTGSSDCDISCKGMTERIHSIN LHNFNSVLETLNEQRNRGHFCDVTVRIHGSMLRAQRCVLAAGS PFFQDKLLLGYSIDIEIPSVVSQSVQKLIDFMYSGVLRVSQSEA LQILTAASILQIKTVIDECTRIVSQNVGDFVPGIQDSGQDTPRG TPESGTSQSSDTESGYLQSHPOHSVDRIYSALYACSMQNGSGE RSFYSGAVVSHHETALGLPRDHMEDPSWITRIHRSQOMERYL STTPETTHCRKQPRPVRIQTLVGNIIHIKQEMEDDYDYGQQRVQ ILERNESECTEDTDQAGTESEPKGESFDSGVSSSIGTEPDSV EQQFGPGAARDSQAEPQPEQAAEAPAEGGPQTNQLETGASSPE RSNEVEMDSTVITVSNSDKSVLQQPSVNTSIGQPLPSTQLYLR QTETLTSNLRMPLTLTSNTQVIGTAGNTYLPALFTTQAGSGPK |

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|------------|--|--|--|
| | | | PFLFSLPQPLAGQQTQFVTVSQPGLSTFTAQLPAPQPLASSAGH STASGQGEKKPYECLCNKTFTAKQNYVKHMFVHTGKPKHQCSI CWRSFSLKDYLIK\HMTHTGVVAYQCSICNKRFTQKSSLNVHM RLHGEKSYECYICKKKFSHKTLERHVALHSASNGTFFPAGTPP GARAGPPGVVACTEGTTYVCSVCPAKFDQIEQFNDHMRMHVSDG |
| 6964 | 1 | 178 | SGRPFPPFFSNTDVYFIKKVTNRWTAGSSYKMTMRKSGIKILL QIFIG\NCSMFVVI |
| 6965 | 757 | 208 | NVFIETRIQGFMTSAHPGQKHDFSMGLLFPLLAALEVCSGGS SGSLGYNLPQNH\GLLGRNTLVLLGQMRRISFPFLCLKDRSDFRF PQEKVEVSQLQKA\QAMSFYDVLQVFNFSHKALL\CCMEHDL PGFTPHFTSSAAGTPGDLGAGDGRRSWGQWVIEGSTLALRRY PQESISTLE |
| 6966 | 820 | 1867 | ITATLGVGRMPGCPGCGMAGPRLLFLTALALELLGRAGGSQP ALRSRGATACRLDNKESWGSALLGERLDTWICSLLSLMVG LSGVFPPLLVIPLMGMTMLRSEAGAWRLKQLLSFALGGLGNVFL HLLPEAWAYTCSASPGEGQSLQQQQQLGLVVIAGILTFALALEK /HVPQQGGGDQPGFPQRPCHCCRRQWRPLSGPAGCRARPRCR GP\DIKVSGLYNLLANTIDNFTHGLAVAASFLVSKKIGLLTTMA ILLHEIPHEVGDFAILLRAGFDRWSAAKLQLSTALGGLGAGFA ICTQSPKGEVETAAWVLPFTSGGFLYIALVNVLPDLLEEDPW |
| 6967 | 162 | 633 | GFLPFKYWILDLSASSRMTDCNPMELSSMSGFEESSELNGFEG TDMKDMRLAEAAVNDVLFVNMNFVSKSLRCADDVAYINVSTK ERNRYCLELTEAGLKVVGYAFDOVDDHLQTPYHETVYSLDLTL\ |
| 6968 | 1 | 2265 | SPAYREAFGR\LLQRLEALKRDGQS RGGGGGRRGGPGARERERPEPTMEAAAGRGCFQPHPLQKT LEQFHLSSMSSLGGPAFASARWAQEAAYKESAKEAGAAVPAV PAATEPPPVHLHPAIQPPPPVLPGPFFMPSPDRSTERCETVLEGE TISCFVVGGEKRLCLPQILNSVLRDFSLOQINAVCDELHIYCSR CTADQLEILKVMGILPFSAPSCGLITKTDAERLCNALLYGGAYP PPCKKELAAALGLLELSERSVRVYHE\CFGKCKGL\LVPELYS SPSAACIQCLD\CRIMYPPHKFVVHSHKALENRTCHWGF\DSA\ NWRAYILLSQDYTGKEEQARLGR\CLDDVKEKFDYGNKYKRRVP RVSEPPASIRPKTDDTSSQSPAPSEKDKPSSWLRTLAGSSNKS LGCVHPQRQLSAFRPWSPAVSASEKELSPHLPALIRDSFYYSKS FETAVAPNVALAPPAQKQVVSPPCAAASVRAPEPLATCTQPRK RKLTVDTPGAPETLAPVAAPEEDKDSEAEVEVESREEFTSSLSS LSSPFTSSSSAKDLGSPGARALPSAVPDAAAPADAPSGLEAEL EHLRQALEGGLDTKAEKFLHEVVKMRVKQEEKLSAALQAKRS LHQELEFLRVAKKEKLREATEAKRNLKEIERLRAENKMKMEA NESRLRLKRELEQARQARVCDKGCEAGRLRAKYSQIEDLQVKL QHAADREQLRADLLREREAREHLEK\VVK\ELQEQWPRARPE AAGSEG\AAELEP |
| 6969 | 1855 | 118 | AGTMHGRLLKVKTSSEQAEAKRLEREQKLKLYQSATQAVFQKRQA GELDESVELTSQLGANPDFATLWNCRRREVLLQLETKQSPPEEL AALVKAELGPLESCLRVNPKSYGTWHHRCLLGRLEPNWTRREL ELCARFLEVDERNFHCWDYRRFVATQAAVPPAEELAFDLSLITR NFSNYSSWHYRSCLLPQLHPQPDSPGQGRLPEDVLLKELELVQN AFFTDNDQSAWFYHRWLLGRADPDALCLHVSREACTVTSF SRPLLVGSRMEILLMVDDSLIVEWRTPDGRNRPSSHVWLCDL AASLNDQLPQHTFRVIWTAGDVQKECVLLKGRQEGWCRDSTTDE QLFRCELSVEKSTVLQSELESCKELQELENKNC\LTILLM RALDPLLVEKETLQYFQTLK\AWDPKRATY\DDLRSKFLLNS VLKMEYAEVRVLHLAKDLTVLCHLEQLLVTHLDSHNRRLTL PFALAALRCLEDPPT\VLQASDNAIESLDGVTNLPRLQELL CNNRLQQPAVLQPLASCPRLLVLLNLQGNPLCQAVGILEQLAELL PSVSSVLT |

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|------------|--|--|---|
| 6970 | 3 | 1528 | SFFPLLSSPSAVGEGKVAVAAPCFGRSECARAKMAYIQLEPLNE GFLSRISGLLLCRWTCRHCCQKCYESSCCQSSSEDEVEILGPFPA QTPFWLMASRSSDKDGSVHTASEVPLTPRTNSPDGRRSSSDTS KSTYSLTRRISSLESRRPSSPLIDIKPIEFGLVLSAKKEPIQPSV LRRTYNDDYFRKFEPHLYSLDSNSDDVDSLTDEEILSKYQLGM LHFSTQYDLLHNLTVRVIEARDLPPPISHDGSQRQDMAHNSPYV KICLLPDQKNSKQTGVKRTQKPVFEERYTFEIPFLEAQRRTLL LTVVDFDKFSRHCVIGKVSVPCEVDLVKGGHWWKALIPSSQNE VELGELLLSLNYLPSAGRLNVDVIRAKQLLQTDVSSQSSDPFVKI QLVHGLKLVKTKTSFRLGTIDPFYNESFSPKVPQEELENASLV FTVFGHNMKSSNDFIGRIVIG\QYSSGP\SEPNHWRMLNTHRT AVEQWHSLSRAECDRVSPASLEVT |
| 6971 | 37 | 3702 | ACFYVPGSRSFKLIPRHGLVNMGRSGKLPQGVSAKLRWKKGHS SDSNPAICRHRQAARSRRFSPRSGRDLTVDAVKLHNLQSGSL RLGKSEAPETPMEEAEALVTEKSSGTFLLSGLSDCTNVTFSKVQ RFWESNSAAHKEICAVLAAVTEVIRSQGKETETETEFALIRKA AQHGVCVSLKGSSEFMFEKAPAHHPAAISTAKFCIQEIEKSGGSK EATTLHMLTLLKDLLPCFPEGLVKSCSETLLRVMTLSHVLVTA CAMQAFHSLFHARPGLSLTAELNAQIITALYDVVPSENDLQPL LAWLKVMEKAHINLVRQLQWDLGLGHLPRFFGTAVTCLLSPHSQV LTAATQSLKEILKECVAFHMDIGSVTSSASGPAQSVAKMFRAV EEGLTYKFHAWSVVLQLLCVFFEACGROAHPVMRKCLQSLCLD RLSPHFPHTAALDQAVGAAVTSMGPEVVQAVPLEIDGSEETLD FPRSULLPVIRDHVQETRLGFFTTYFLPLANTLKSAMDLAQAG STVESKIYDTLQWQMTLLPGFCTRPTDVAISFKGLARTLGMAT SERPDLRVTVQALRTLITKGCQAEADRAEVSRFAKNFLPILFN LYGQPVAAAGDTPAPRAVLETIRTITITDTQLVNSLLEKASEK VLDPASSDFTRLSVLDLVVALAPCADEAAISKLYSTIRPYLESK AHGVQKKAYRVLEEVCAAPQPGALFVQSHLEDLKKTLDSLSRS TSSPAKRPRLLKCLLHIVRKLASHEKEFITALIEVILCTKEVSV GARKNAFALLVEMGHAFIRFGSNQEEALQCYLVLIYPGLVGAVT MVSCILALTHLLFEFKGLMGTSTVEQLLENVCILLASRTDVS KSALGFIKVAVTMDVAHLAKHVQVMEAGIKLSDDMRHFRMK LRNLFT\KFIPK\FGILTGWGKAVGPKYHRVLRVNRKAEARAK RHRALSQAAVEEEEEEEBEPAGQKGDSEBETLADSEDEEDNE EEERSRGKEQRKLARQSRRAWLKEGGGDEPLNFDLPKVAQRVLA TQPGPGRGRKKDHSFKVSADGRLLIREADGNKMEEEGAKGED EEMADPMEDVIIRNKKHQLKHQKEABEELEIPPQYQAGSGGI HRPVAKKAMPGAEYKAKKAKGDVKKGRPDYAYIPLNRSKLNR RKKMKLQGGQKGLVKAQRGSQVGHKNRRKDRRP |
| 6972 | 2179 | 973 | PGGAILPLWRRTREPRAVPRGAQRGRARSAGRIIPSSQSPS PAEAGGATRSPPPPRPPARPPGPSAPPLLRSDAGPGATVSAAA AAATERARRGATMGAQLSTLGHMVLFPVWFLYSLMKLFQRSTP AITLESPIKYPLRLIDREIISHDTRFRFALPSQHILGLPVG QHIYLSARIDGNLVVRPYTFISSDDDKGFVDLVKIVYFKDTHPK FPAGKMSQYLESQIGDTIEFRGPSGLLVYQGGKGFARPDKK SNPIIRTVKSVMGIAAGGTITPMLQVIRAIMKDPDDHTVCHLLP ANQTEKDILLRPELEELRNKHSARFKLWYTLDRAPFANDYGGQ\ FVNBEIMIRDHLPPPE\EEPLVLMCGPPPMIYQACLPNL\DHVGH PTERCVF |
| 6973 | 1 | 1964 | LQPRCAHRLRAQKCGRFAPGV DAMVLCPIVIGKLLHKRVVLSA SPRRQEIILSNAGLRFVVPVSKFEKLDKASFATPYGYAMETAKQ KALEVANRLYQKDLRAPDVVIGADTIVTVGGLILEKPVDKQDAY RMLSRFE/SGREHSVFTGVAIVHCSSKDHLQDTRVSEFYETKV KFSELSEELLWEYVHSGEPMKAGGYGQIQAALGGMVSVHGDFL NVVGFPLNHFCKQLVKLYYPPRPEDLRRSVKHSIPADTFEDL |

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|------------|--|--|--|
| | | | SDVEGGGSEPTQRDAGSRDEKAEAGEAGQATAEAECHRTRETLP PFPTRLLELIEGFMLSGLLTACKLVFDLLKDEAPQKAADIAS KVDASACGMERLLDICAAMGLEKTEQGYSENTETANVYLASDGE YSLHGFIMHNDLTWNLFYLEFAIREGTNQHHRALGKKAEDLF QDAYYQSPETRLRFMRAMHGMTKLACQVATAFNLSRFSSACDV GGCTGALARELAREYPRMQVTVDLPDIIELAHFQPPGPQAVQ IHFAGDFFRDPLPSAELYVLCRILHDWDDKVHKLRSVAESC KPGAGLLLVETLLDEEKRAVQRAIMQSLNMLVQTEGKERSLGEY QCLLELHGFHQVQVHLGGVLDAIL\PPKWPPAQACSL |
| 6974 | 3082 | 2172 | RSACAFAFASRPFLELFAFPGSHRSPPGRGVATSAQCALSVRK LLAARPGLGTKYQATMVYKTLFALCILTAGWRVQSLPTAPLSV SLPTNIVPPTTIWTSPPQNTDADTASPSNGTHNNSVLPVTASAP TSLLPKNISIESREEEITSPGSNWEGTNTDPSPSGFSSTSGGVH LTTTLEHSLGTPEAGVAATLSQSAEPTLISPOAPASSPSSL STSPPEVFSASVTNHSSTVTSTQPTGAPTAPESPTESSDHT PTSHATAEPVPQEKTPPTTVSGKVMCELIDMET\PPFPFG |
| 6975 | 2 | 500 | RPRPTVHCCKWALKLETAMETLINVFHAHSGKEGDKYKLSKKE KELLQTELSGFLDVKELML*ATEALKTFEEA*KSPIIQCSSRS SLPPAPQPPPYL*LSAVPFIHLPLPLPPQAQKDVDAVDKVMK BLDENGDEVDQFQYVVLVAALTVAENFFWENS |
| 6976 | 1216 | 970 | GCQL*VAYGTENSEFVTFAHFPEDTVEQKAESVGRIMPHTEAR I MNMEAGTLAKLNTPEGLCIRGYCVMLGYWGEPOKTEEAVDQDKW YWTGDVATMNEQGFCKIVGRSKDMIIRGGENIYPAELEDFHTH EKVQEVQVVGKDDRMGEEICACIRLKDGETTVEEIKAFCKGK ISHFKIPKYIVFVTNYPLTISGKIQKFKLRQMERHLNL*IKQQ ACPGRLA |
| 6977 | 1298 | 588 | SLFINTNLLSNQIRKTSFGMCSEPISDNTEDQKGLKTPDFA*R ANKSKSHVNGNRTVEPFEGTQMAVFGMGCFWGAERKFWVLKG VYSTQVGFAGGYTSNPTYKEVCSBKTGHAEVVRVYQPEHMSFE ELLKVFWEHNDPTQGMRRQNDHGTQYRSATYPTSAKQMEALSS KENYQKVLSEHGFGPITTDIREGQTFYVYEDYHQVLSKNPNGY CLGGGTGVSCPVGIKK |
| 6978 | 3 | 242 | SPFFRDSRRCGCKGSSLRHTAVAMVKLSKEAKQRLQQLFKGSQ FAIRWGFIPLVLYLGFKRGADPGMPEPTVLSLLWG |
| 6979 | 3917 | 1146 | DEARVRGEAVAAAILSRCHWSGPPPPFPSPDRKGLRGTEPWE AGPGSGATPGARAMDVRLKVNELREELQRRGLDTRGLKTELAE RLQAALAEAEPPDERELDADDEPGRPGHINEEVETEGGSELEGT AQPPPPGLQPHAEPPGGYSGPDGHYAMDNITRONQFYDTQVIKQE NESGYERRPLEMEQQQAYRPEMKTEMKQCAPTSFLPPEASQLKP DRQQFQSRKRPYEENRGRGYFEHREDRRGRSPQPPAEDEDDFD DTLVADITYNCDLHFKVARDRSSGYPLTIEGFAYLWSGARASYG VRRGRVCFEMKINERISVKHLPSTEPDHPVVRIGWLSLDSCTQL GEEPFSGYGGTGKKSINSRFENYGDKFAENDVIGCFADFECGN DVELSFTKNGKWMGIAFRIOKEALGGQALYPHVLVKNCAVEFNF GQRAEPPYCSVLPGFTFIQHLPLSERIRGTGVPKSKAECEILMMV GLPAAGKTTWAIKHAASNPSKKYNILGTNAIMDKMRVMGLRRQR NYAGRWDVLIQATQCLNRLIQIAARKKRNILDTQNVYGSQAR RKMRPFEGFQRKAIVICPTDEDLKDRTIKRTDEEGKDVPDHAUL EMKANFTLPDVGDFLDEVLFIELQREADKLVRQYNEEGRKAGP PPEKRFDRGGGGFRGRGGGGGFQRYENRGGPPGGNRGGFQNRGG GSGGGGNYRGGFNRRSGGGGYSQNRWGNNDNNNSNNRGSYNRA PQQQPPPPQPPPPQPPPPQPPPPPSYSPARNPPGASTYNKNSNI PGSSANTSTFTVSSYSPPQSGFFFPSTFQPSYSQPPYNQGGYSQ GYTAPPPPPPPPAYNYSYGGYNPAVTPPPPTAQTYPPQPSY NQVQQYQAQWNQYQNGQWPPYQNYDYGSYSNTQGGTSTQ GTRGRKTGRVAAPSTRRTGNMQLQTRSPAMLSDFGLGYHPT |
| 6980 | 1 | 420 | |

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|------------|--|--|---|
| | | | CWTLRWPPPLCSLHALHVFHCLFSSRLGTVPSPRLAMDPNCSCEA GGSCACAGSCKCKCKCTSCCKSCCSCCPGLGCAKCAQGCICKGA SEKSCCA |
| 6981 | 10 | 1054 | PGRGFRRASLRPAFAARGVFQGGGLGQAKQARTRACAALPTPHPS APRLLEPQGVFLFPFPPGWPWNMLTKAQYDEIAQCLVSVPT RQSLRKLKQRFPSQSQATLLSIFSQEQKHKIRTHAKHTSEAI ESYQRYLNGVVKGAAPVLLDLANEVDYAPSLMARLILERFLQ EHEETPPSKSIINSMRLRDPSPQIPDGVLANQVYQCIVNDCCVGPL VDCIKHAIGHEHEVLLRDLLEKNLSFLDEQDLRAKGYDKTPDF ILQVPVAVEGHIHWIESKASFGDECSHHAYLHDQFWSYWNRF PGLVIYWGFIQELDCNRERGILLKACFPNTIVTLCHSIA |
| 6982 | 153 | 1285 | FPQDCSAPAAPGLAGSEPRRLRAYRRRQRARGLKRVAWLAPP PSLLQGLQGWQAQAPVDGTLGPEDSRASSPMIQNSRPSLLQPDV GDTVETLMLHPVIAKFLCGSISGTCSTLLFQPLDLLKTRQLTLQ PSDHGSRRLGMLAVLLKVVRTESLLGLWKGMSPSIVRCVPGVGI YFGTLYSLKQYFLRGHPPTALESVMLGVGSRVAGVCMSPITVI KTRYESGKYGESIYAALRSIVHSEHGRGLFSGLTATLLRDAPF SGIYLMFYNTKKNIVPHDQVDATLIPITNFSGCI FAGILASLVT QPADVIKTHMQLYPLKFQWIGQAVTLIPKDYGLRGFFQGGIPRA LRRTLMAAMAWTVVEEMAKMGLKS |
| 6983 | 82 | 773 | EMSFLQDPSFFTMGWMSIGAGALGAALALLANTDVFSLKPKQK AALEYLEDIDLKLEKEPRTFKAKELWEKNAGVIMAVRRPGCF CREEAADLSLKSMLDQLGVPLYAVVKEHIRTEVKDFQPYFKGE IFLDEKKKFYGPQRKMMFMGFI RLGVWYNFFRAWNGGFSGNLE GEGFLLGGFVVGSGKGILLHREKEFGDKVNLLSVLEAAKMI KPQTLASEKK |
| 6984 | 1845 | 1282 | GGRSAYSLPAGSLPRVPATAAAKMASGVQVADEVCRIFYDMKVR KCSTPEEIKKRKKAIVFCLSDAKKCIIVEEGKEILVGDVGVTIT DPFKHFVGMPLPEKDCRYALYDASFETKESRKEELMFFLWAPELA PLKSKMIYASSKDAIKKFKQGIKHECQANGPEDLNACIAEKL GSLIVAFEGCPV |
| 6985 | 1887 | 1324 | RRTAGIYPCFPKPGRTRHALCSVLLLTGQLAFDDFQESCAMM WQKYAGSRRSMPLGARILFHGVFYAGGFAIVVYL IQKFHSRALY YKLAVEQLQSHPEAQEALGPPLNIHYLKLIDRENFDIVDAKLE IPVSGSKSEGLLYVHSSRGGFFQRWHLDEVFLLEKDKGQQIPVFK LSGENGDEVKKE |
| 6986 | 642 | 1350 | YHLYFKMGDDPNRKKQALNRLRAQLRKKKESLADQDFPKMYIAF VFKEKKKKSALFEVSEVIPVMTNNYEENILKGVDRSSYSLESSL ELLQKDVVQLHAPRYQSMRRDVIGCTQEMDFILWPRNDIEKIVC LLFSRWKESDEPFRPVQAKFEFHGDYKQFLHVLRSRDKTGIV VNNPNQSVFLFIDRQHLQTPKNKATIFKLCSICLYLPQEQILTHW AVGTIEDHLRPYMP |
| 6987 | 1623 | 341 | LEAAEKASRAFKESQRQTD SKNYETENWSPOKSQRRYDMYNTAC FLGEIEVGLYTIQILQLPFFHKNELSKKHMVQFLSGKWTIPP DPRNECYLALS KFTSHLKNLQSDLKRCDFDFIDYVLLKMYTQ KETAEIMLSKKVSRCFRKYTELFCFLDPCLLQSKESQLLQBEENC RKKLEALRADRFAGLLEYLNPYKDATTMESIVNEYAFLQONS KKPMTNEKQNSILANTIILSCLKPNKLIQPLTLKKQLREVLF VGLSHQYPGPYFLACLFWPENQELDQDSKLEKYVSSLNRSFR GOYKRMCRSKQASTLFYLGKXKGLNSIVHAKIEQYFDKAQNTN SLWHS GDVWKKNEVKDLLRRLTGQAEGKLISVEYGT EEEKIPV ISVYSGPLRSGRNIERSVYLGFSIEGPPGL |
| 6988 | 3 | 689 | TQLLRPAVFGSAASGIRSLGWSASSGHWCAAGRAHAFVPR LVRGLGAASTAAPQDAQTGPQMPRADCIMRHLPIYFCRGQVVRG FGRGSKQLGIP TANFPEQVVDNL PADISTGIYGWASVSGSDVH KMVVSIGWNPYYKNTKSMETHIMHTFKEDFYGEILNVAIVGYL |

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|------------|--|--|--|
| | | | RPEKNFDSLESLSAISAIQGDIEEAKRRLLEPEHLKIKEDNFFQVS KSKIMNGH |
| 6989 | 2 | 1118 | LMPSDRPLSPSTHASAGSHCHAPPTTARRAFFIPFGSKSNMATL KDQLIYNLLKEEQTPQNKITVVGAVGMACAISILMKDLADEL ALVDVIEDKLKGEMMDLQHGSLFLRTPKIVSGKQDYNVTANSKL IITAGARQQEGESRLNLVQRNVNIFKFIIIPNVVKYSPNCKLLIV SNPVDILTIVAVKISGFPPKNRVIGSGCNLDSARFRLMGERLGV HPLSCHGWVLGEHGDSSVPVWVGSMNVAGVSLKTLHPDLGTOKDK EQWKEVHKQVVESEYEVILKGYTSAIGLSVADLAESIMKNLR RVHPVSTMIKGLYGIKDDVFLSVPCILGQNGISDLVKVTLTSEE EARLKKSADTLWGIQKELQF |
| 6990 | 719 | 258 | THASGMASVVLALRTRTAVTSLLSPTATALAVRYASKSKSGSS KNLGGKSSGRRGQIKKMEGHYVHAGNIATQRHFRWHPGAHVGV GKMKCLYALEEGIVRYTKEVYVPHPRNTEAVDLITRLPGGAVLY KTFVHVVPAPKEGTFKLVAL |
| 6991 | 169 | 451 | RRSSDFHNPGLSRPVSLENIHHQVICTKNKRRNPCKTAYLL SLLMTNLPNESTENQPVDAWAFITLQDEFLTYACVEGTGCLF CGRHVH |
| 6992 | 944 | 510 | RQAPGCSLALRQVRQVYCGLVRAFPVQTRPLSSRFVERRGALY RSPMNQENPPYPGPGPTAPYPPYPQPMGPGMGPPYPPQGY PYQGYQYQGWQGGQPEPPKTTVYVVEDQRRDELGPSTCLTACWT ALCCCLWDMLT |
| 6993 | 1 | 374 | QWCVTCPQHNRQGPAPVPPGIQAYGAAPPEDLQVDFTEMKCRG DRVWIKNWNVASLCPWLKGPQTWVLSPTAVKVEGIPAWIHSH VKPAARETWEARPSDPNPFVTLKKTSPAPVTPGS |
| 6994 | 346 | 1100 | QWPEKDPVMAASSISSPWGKHVFKAILMVLVALILLHSALAQR RDFAPPQQKREAPVDVLTQIGRSVRGTLDAWIGPETMHLVSES SSQVLWAISSAISVAFFALSGIAAQLLNALGLAGDYLAQGLKLS PGQVQTFLLWGAGALVVYLLSLLGLVLALLGRILWGLKLVIF LAGFVALMRSVPDPSTRALLLALLILYALLSRLTGSRASGAQL EAKVRGLERQVEELRWRQRAAKGARSVEE |
| 6995 | 144 | 1346 | GSVAVGLSGIMAAQKDLWDAIVIGAGTQCCFTAYHLAKHRKRIL LLEQFFLPHSRGSSHGQSRIIRKAYLEDFYTRMHCEYQIWAQL EHBAGTQLHRQTGLLLGMKENQELKTIQANLSRQVEHQCLSS EELKQRFNIRLPRGEVGLLDNNGGVIYAYKALRALQDAIRQLG GIVRDGEKVVEINPGLLVTVKTTSRSYQAKSLVITAGPWTNQLL RPLGIEMPLQTLRINVCYWRMVPGSYGVSAFPCFLWLGLCPH HIYGLPTGEYPGLMKVSYHHGNHADPEERDCPTARTIGDVQIL SSFVRDHLPLDKPEPAVIESCMYTNTPDEQFILDHHPKYDNIVI GAGFSGHGFKLAPVVGKILYELSMKLTSPSYDLAPFRISRFPSLG KAIL |
| 6996 | 543 | 1942 | ETANAEEAARKSAMDWKEVLRRRLATPNTCPNKKKSEQELKDEE MDLFTKYSEWKGGRKNTNEFYKTIIPFYRLPAENEVLLQKLR EESRAVFLQRKSRELLDNEELQNLWFLLDKHQTPPMIGEAMIN YENFLKVGKAGAKCKQFFAKVFAKLLHTDSYGRISIMQFFNY VMKRWLHQTRIGLSLYDVAGQGYLRESDLNILELITPLQOL DGLEKSFYSFYVCTAVRKFFFLDPLRTGKIKIQDILACSFLDD LLELRDEELSKESQETNWFSAAPSALRVYGGYVNLKDHNGMLSK EELSRYGATMTNVFLDRVFQCLTYDGEMDYKTYLDFVLALEN RKEPAALQYIFKLLDIENKGYLVNVSFRAIQELMKIHGQD PVSFQDVKDEIFDMVKPKDPLKISLQDLINSQGDVTVTILIDL NGFWTYENREALVANDSENSADLDDT |
| 6997 | 370 | 1104 | AMELTIFILRLATYILTFPLYLLNFLGLWSWICKKWPPYFLVRF TVIYNEQMASKKRELFSNLQEFAGPSGKLSLLEVCGGTGANFKF YPPGCRVTCIDPNPNFEKFLIKSLAENRHLQFERFVVAAGENMH |

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|------------|--|--|---|
| | | | QVADGSDVVVCTLVLCVKNQERILREVCRVLRPGGAFYFMEH VAAECSTWNYFWQQVLDPAWHLLFDGCNLTRESWKALERASFSLKLOHIQAPLSWELVRPHIYGYAVK |
| 6998 | 2 | 616 | FVSRALLRVSRRHFAEERAAPGRPEADPTCEPGATNCPPEPLWC SHLPVPYAPPTMESRGKSASSPKPDKVPQVTTAKVPPAADGK APLTKPSKKKAPAEKQPPAAPTAPAKTSAKADPALNNHNS LKPAPTVPSSPDATPEPKPGDGAEEDEAASGGPGGRGPWSCEN FNPLLAVAGGVAAIAIALILGVAFLVRKK |
| 6999 | 14 | 1591 | GRAGACSRRTAMSIETESSDVIRLIMQYLKENSILHRALATLQE ETTVSLNTVDSIESFVADINSGHWDTVLQAIQSLKLPDKTLIDL YEQVLELELIELRELGAARSLRQTDPMIMLKQTQPERYIHLNENL LARSYFDPREAYPDGSSKEKRAAIAQALAGEVSVVPPSRLMAL LGQALKWQHQGLPPGMTIDLFRGKAAVKDVEEEKPPTQLSRH IKFGQKSHVECARFSPDGQVLTGSDGFIENVNFTTGKIRKDL KYQAQDNFMMDDAVLCMCFSRDTEMLATGAQDGKIKVWKIQSG QCLRRFERAHSKGVTCLSFSKSSQILSASFDQTIIRHGLKSGK TLKEFRGHSSFVNEATFTQDGHYIISASSDGTVKIWNMKTTECS NTFKSLGSTAGTDITVNSVILLPKNPEHFVVCNRSNTVVIMNMQ GQIVRSFSSGKREGGDFVCCALSPRGEWIYCVGEDFVLYCFSTV TGKLERLTIVHEKDVIGIAHHPHQNLIATYSEDGLLKLWKP |
| 7000 | 2 | 827 | GPVGVFLLEMESEGPPESESEFFSQRENEEEEAQEPETGFP KNPLLQPALTDGVEGLQKIFEDPENPHHEQAMQLLEEDIVGRN LLYAACMAGQSDVIRALAKYGVNLNEKTTRGYTLHLHCAAAGRL ETLKALVELDVIDEALNFREERARDVAARYSQTECFEFLWDADA RLTLKKYIAKVSIAVTDTEKSGKLLKEDKNTILSACRAKNEWL ETHTEASINELFEQRQOLEDIVTPIFTKMTTPCQVKSASVTSH DQKRSQDDTSN |
| 7001 | 2056 | 844 | RRCLIIAFLKGCFFIYFIFIFETEFLLSCCPGWSAVAQSRILAN FASQVQAIFILPKDSQVGPDKSEAPKRALYESVFGSGEICGP TSFKRLCIRPSEPVDVAVVSVKHDPLPLPEANGHRSTNSPTI VSPAIVSPTQDSRPNMSRPLITRSPASPLNNQGIPTPAQLTKSN APVHIDVGGHMYTSSLATLTYPESRIGRLFDGTEPIVLDLKLQ HYFIDRQGMFRYILNFLRTSKLLIPDDFKDYTLLEYEAKYFQL QPMLEMERWKQDRETGRFSRPECCLVVRVAPDLGERITLSGDK SLIEEVFPPEIGDVMCNSVNAWNHDSHTVIRFPLNGYCHLNSVQ VLERLQQRGFEIVGSCGGVDSSQFSEYVLRRELARTPRVPSVI RIKQEPDL |
| 7002 | 1043 | 498 | PMPSSSTRWTS*TYTDTSSAWACRPTGTCT*TAAPGPTVRWWP TPCSRHQSRRLTWCWCSTSRPCGR*GGLCVRTAPTRPTTSASSS SWTSAGTSPAGRRGTATSGTATTSVWPGCGTRMWSTQWSSV PRSRSCCSRPAATPPSKPGAPHAPCASSRHLAHLAPSSPGLPA RGAEVC |
| 7003 | 818 | 61 | QGRFRAFCWQRDFLQPPGMRLSALLALASKVTLPPHYRYGMSFP GSVADKRNKPPWIRRRPVVVEPISDEDWYLFCDTVEILEGKDA GKQGVVQVIRQRNWVVGGLNTHRYIGKTMIDYRGTMIPSEAP LLHRQVKLVDPMDRKPTEIEWRFTAGERVRVSTRSGRIIPKPE FPRADGIVPETWIDGPKDTSVEDALERTYVPCCLKTLQEEVMEAM GIKETR\NTRRSIGIEPGAQQLLPNFCPSLEG |
| 7004 | 121 | 2285 | FLLPVLTSSRLRQPAVPHARLGGVEPAAMKSARAKTPRKPTVKK G\PKRTLKTQLG/YICRVRLPGFPDQECCEIVINNTVQLHTPE GYRLNRNGDYKETQYSFKQVFGTHHTQKELFDVVANPLVNDLIH GXNGLLFTYGVGTSGKTHMTGSPGEGGLLPRCLDMIFNSIGSF QAKRYVFKSNDRNSMDIQCEVDALLERQKREAMPNPKTSSSKRO VDPEFADMITVQEFCKABEVEDSDVYGVFVSYLEIYNNYIYDLL EEVFFDPIPNLNLNLCFVKIKNNMYVAGCTEVEVKSTEBAFE VFWRGQKKRIANTHLNRESSRSHSVFNIKLVAPLDADGDNVL |

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|------------|--|--|---|
| | | | QKEQITISQLSLVDLAGSERTNRTAEGRNRLREAGNINQSLMT LRTCMDVLRNQMVGNTKMPYRDSKLTFLPKNYFDGEGKVRMI VCVNPKAEDYEENLQVMRFAEVTQEVVARPDKAICGLTPGRR YRNQPRGP\IGNEPLVTDVVLQSFPLPSCEILDINDEQTLRL IEALEKRHNLRQMMIDEFNKQSNAPKALLQEFDAVLNKENHMQ GKLNKEKMSIGQKLEIERLEKKNKTLEKTIETLEKTTIYED KRNLLQLELETQNKQLQRFSDKRRLEARLQGMVTETTMKWEKRC ERRVAAKQLEMONKLVVDEKLLQKLAIVTEPKTEKPERPSRER DREKVTQRSVSPSPVPSYL |
| 7005 | 63 | 876 | RNMALYQRWRCLRLQGLQACRLHTAVVSTPPRWLAERLGLFEEL WAAQVKRLASMAQKEPRTIKISLPGGQKIDAVAWNTTPYQLARQ ISSTLADTAVAAQVNGEPYDLERPLETDSDLRFLTDFSPEGKAV FWHSSTHVLGAAAEQFLGAVLCRGPSTGYGFYHDFLKGKERTIR GSELPVLERICQELTAAARPFRRLEASRDQLRQLFDNPPFKLHL IEEKVTGPTATVYGCGLTLDLQCGPHLRHTGQIGGLKLSNSSS LWRSSG |
| 7006 | 22 | 898 | NAFGRHSTAVKMAAAWLQVLPVILLLLGAHPSPLSFFSAGPAT VAAADRSKWHIPISGKNYFSFGKILFRNTTIFLKFDPGEPCDLS LNTITWYLSADCYNETIYNFKAEEVELYLEKLEKRGKLSGKYQTS SKLFQNCSELFKFTQTFSGDFMHRLLPLGKQKQKENGNTLFTIG DKTAMHEPLQWQDAPYIFIVHIGISSKESKENSLSNLFMT VEVKGPYELTLEDYPLMIFFMVMCIYVLFGLVNLWASACYW DLRLIQFWIGAVIFLGMLEKAVFYAGFQ |
| 7007 | 2 | 1001 | AMTVSGPGTPEPRPATPGASSVEQLRKEGNEFLKCGDYGGALAA YTQALGLDAPQDQAVLHRNRAACHLKLEDYDKAETEASKAIEK DGGDVKALYRRSQALEKLRGLDQAVLDLQRCVSLPKNVFOEA LRNIGGQIQEKVRYMSSDQAKVEQMFQILLDPEEKGTTEKKQKAS QNLVVLAREDAEAKIFRSNGVQLLQRLDMGETDMLAALRTL VGICSEHQSRVTATLSILGTRRVVSLGVESQAVSLAACHLLQV MFDALKEGVKKGFRGKEGAIIVGENKQVWGLLDVTVMMEGMLSQ PGQFFGDQTCSCRLFGIRFGDIILL |
| 7008 | 70 | 1478 | CRSALGHERPPPAHLPAQCRRRLQTCPRSCRWLGRPPSGLPQGP SPPPLAGPGQKMVQKPAELQGFHRSFKGQNPFFELAFSLDQPDH GDSDFGLQCSARPMPASQPIDIPDAKRGKKKRGRATDSFSG RFEDVYQLQEDVLGEGAHARVQTCINLITSQEYAVKIEKQPGH IRSRVFREVMELYQCQGHNVLELIEFFEEEDRFYLVFEKMRGG SILSHIHKRRHFNELEASVVVDVASALDFLHNKGIAHRDLKPE NILCEHPNQVSPVKICDFDLGSGIKLNGDCSPISTPELLTPGCS AEYMAPEVVEAFSEASIIDKRCDLWSLGVTLVILLSGYPPFVG RCGSDCGWDRGEACFACQNMFLFESIQEGKYEFPDKDWAHISCAA KDLISKLVDRDAKQRLSAAQVLQHPVWQGCAPENTLPTPMVLQR WDSHFLLPPHPCRIHVRPGLVTRTVTVNE |
| 7009 | 1 | 626 | ARQLRNSWVDDFVAAPLIPLSQQIPTGNSLYESYYKQVDPAYTG RVGASEAALFLKKSGLSDIILGKIWDLADPEGKGFLLDKQGFYVA LRLVACAQSGHEVTLSNLNLSMPPPKFHDTSFPLMVTTPPSAEAH WAVRVEEKAKPDGIFESLLPINGLLSGDKVPVLMNSKLPDVL GRVWDLSDIDKDGHLVRDEFVAMHLVYRALE |
| 7010 | 79 | 571 | SHTRRAVVPETLLSPLCPLLGCGGTAMSGGEQKPERYYVGVDTGT GSVRAALVDQSGVLLAFADQPIKNWEPQFNHHEQSSEDIWAAAC VVTYKVVQGIIDLNIQIRGLGFATCSLVVLDKQFHPVFNQEGDS HRNVMMLDHRASQVNRINETKHSVLQYVGG |
| 7011 | 3 | 994 | RIQTLNPNQSQQTQPLLKTPPAVLQPIAPQTFGVQTOPQPOS LQAQISAASITPLLQTPQPLLQPPQKAGLLQPPVRIVSQPPQ ARRLDPPSRFSGRNDRGDQVPRKDDRSRERERRRRSRERSPO RKRSRERSRPRRERSRPRRVRVVPRTVQFSKFLDCPSCDMM ELRRRYQNLXIPSDFFDAQFTWDAFPLSRFPQGNVCFYVMH |

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|------------|--|--|---|
| | | | REVESLEKNMMAILDPPADHLYSAKVMMLASPSMEDLYHKSCAL AEDPQSLRDGFOHPARLVKFLVGMKKGDEAMAIGGHWSPLDGP DPEKDPVLIKT\AIRCCKALTG |
| 7012 | 1 | 2661 | RRAGSVKRGEARLFGPTERQSERPLRPSAARRPEMLSGKKA AAAAAATGTEAGPGTAGGSENGSEVAAQAGLSGPAEVGP VGERTPRKKEPPRASPPGGLAEPGSGAGPQAGPTVVP TGIAETPEG\RTSRKRKRAKVEYREMDLANLSEDEYYSEER NAKAKEKKLPPPPQAPPEEENESEPEEPGVEGAFAQSR DRMTSQEAACFPDIISGPQQTQKVFLFIRNRTLQWL TFEATLQQLAEPYNSDTVLVHRVHSYLERHGLINFGIYKRIKPL PTKKTGKVIIGSGVSGLAARQLQSGMDVTLLEARDRVGGRV ATFRKGNVYADLGAMVVTGLGGMMAVVSQVNMELAKIKQKCP LYEANGQAVPKEKDEMVEQEFNRLLEATSYLSHQLDNFV VSLGQALEVVIQLQEKHKVDEQIEHWKIVKTQBELKELNKMV NLKEKIKELHQYKEASEVKKPRDITAEFLVKSXKRDLTALCKE YDELAETQGLKEELQLEANPPSDVYLSRDRQILDWHFANLE FANATPLSTLSLKHWDQDDDFEFTGSHLTVRNGYSCVPVALAEG LDIKLNTAVRQVRYTASGCEVIAVNRSTSTQTFYKCDVAVLCTL PLGVLKQPPAVQFVPLPEWKTSAVQRMGFGNLNKVLCFDRV FWDPSVNLFGHVGSTTASRGELFLFNNLYKAPILLALVAGEAAG IMENISDDVIVGRCLAILEKIFGSSAVPQPKETVVSRRADPWA RGSYSYVAAGSSGNDYDLMAQFITPGPSIFGAPQPIPRLFFAGE HTIRNYPATVHGALLSGLREAGRIADQFLGAMYTLPRQATPGVP AQQSFSM |
| 7013 | 1 | 2661 | RRAGSVKRGEARLFGPTERQSERPLRPSAARRPEMLSGKKA AAAAAATGTEAGPGTAGGSENGSEVAAQAGLSGPAEVGP VGERTPRKKEPPRASPPGGLAEPGSGAGPQAGPTVVP TGIAETPEG\RTSRKRKRAKVEYREMDLANLSEDEYYSEER NAKAKEKKLPPPPQAPPEEENESEPEEPGVEGAFAQSR DRMTSQEAACFPDIISGPQQTQKVFLFIRNRTLQWL TFEATLQQLAEPYNSDTVLVHRVHSYLERHGLINFGIYKRIKPL PTKKTGKVIIGSGVSGLAARQLQSGMDVTLLEARDRVGGRV ATFRKGNVYADLGAMVVTGLGGMMAVVSQVNMELAKIKQKCP LYEANGQAVPKEKDEMVEQEFNRLLEATSYLSHQLDNFV VSLGQALEVVIQLQEKHKVDEQIEHWKIVKTQBELKELNKMV NLKEKIKELHQYKEASEVKKPRDITAEFLVKSXKRDLTALCKE YDELAETQGLKEELQLEANPPSDVYLSRDRQILDWHFANLE FANATPLSTLSLKHWDQDDDFEFTGSHLTVRNGYSCVPVALAEG LDIKLNTAVRQVRYTASGCEVIAVNRSTSTQTFYKCDVAVLCTL PLGVLKQPPAVQFVPLPEWKTSAVQRMGFGNLNKVLCFDRV FWDPSVNLFGHVGSTTASRGELFLFNNLYKAPILLALVAGEAAG IMENISDDVIVGRCLAILEKIFGSSAVPQPKETVVSRRADPWA RGSYSYVAAGSSGNDYDLMAQFITPGPSIFGAPQPIPRLFFAGE HTIRNYPATVHGALLSGLREAGRIADQFLGAMYTLPRQATPGVP AQQSFSM |
| 7014 | 3 | 3950 | DPEVGDKIRILATLEDGWLESSLKGRGTGIFPYRFVLCEDTRVE ETMALPQEGSLARIPETSLDCLNTLGVEEQRHETSDEHEBEPD CIISEAPTSPLGHLTSEYDTRNSYQDEDTAGGPPRSPGVWEM PLATDSPTSDPTEVVNGISSQPQVEFFHNLQKSQYXSTVGGSH HSEQYDPLLPLEARTRDYASLPPKRMYSQKLTQKPVLPYLRGS SVSASRVVKPRQSSPQLHNLASYTKKHHTSSVYSISERLEMKPG PQAQGLVMEATHSQGDGSTDLSKLTQQLIEFEKSLAGPGTEP DKILRHFSIMDFNSEKDIVRGSSKLITEQELPERRKALRPPPPR PCTPVSTSPHLLVDQNLKPAPPLVVRPSRPAPLPPSAQQRNAV SPKLLSRHRPTCETLEKEGPGHMGRLDQTSFCPLVLVRIEME RDLDMSYRAQELNLMLEEKQDESSRAETLEDLKFCESNIESLN |

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|------------|--|--|---|
| | | | MELQQLREMTLLSSQSSSLVAPSGSVSAENPEQRMLEKRAKIVIE ELLQTERDYIRDLEMCIERIMVPMQQAQVFNIDFEGFLFGNMQMV IKVSKQLLAALAEISDAVGPFVFLGHRDELEGTYKIYQCNHDEAIA LLEIYEKDEKIQKHLQDSLADLSLYNEWGCTNYINLSSFLIKP VQRVMRYPLLLMELLNSTPESHDPKVPPLTNAVLAKEINVININE YKRRKDLVLKYRKGDEDSLMKISKLNHISI IKKSNRVSSHLLKH LTGFAPQIKDEVFEETEKNFMRQERLIKSFIRDLSLYLQHIRE ACVKVVAVSMWDVCMERGHRLDEQFERVHYISDQLFTNFKER TERLVISPLNQLLSMFTGPHKLQKRFDKLLDFYNCTERAELK DKKTBELQ SARNNYEAALNAQLLDEL PKFHQYAQGLFTNCVHG AEAHCDFVHQALEQLKPLLSLLKVAGREGNLI AIFHEEHSRLVQ QLQVFTFFPESLPATKKPFERKTIDRQSARKPLGLPSYMLQSE ELRASLLARYPPEKLFQAERNFNAAQDLDSLEGLDVGVIKKK DPMGSQLNRWLDNGVTGKFVYSSFLKPYNPRRSHSDASVGS TESEHGSSSPRFPQNGSGSTLTFFNP\ S\MAVSFTSGSCQKQ DASPPPKWDQGTLSASLNPSNSESPPSRCPDSDSTSQPRSGD SADVARDVKOPTATPRSYRNFHPEIVGYSVPGRNGSQDLVKC CARTAQAPEDRSTEPDGEAEQNGVYFAVYTFKARNPNELSVSA NQKLIKILEPKDVTGNTWLLAEVNGKKGYVPSNYIRKTEYT |
| 7015 | 1842 | 513 | RQAWHE\VAAPSWRGARLVQSVLRVWQVGHVAREVTFPSSLL GFQRCVSCVAGSAFSGPRLASASRNGQSSALDHLGFSQPD SVTPCVPVAVSMNRDEQDVLVHHPDMPENSRVLRVVLGAPNAG KSTLSNQLGRKVFVSRKVHTTRCOALGVITEKETQVILLDT GIISPGKQKRHHLESLLEDPWKSMESADLVVVLVDVSDKWT QLSPQLLRCLTKYSQIPSVLVMNKVDCLKQKSVLLELTAALTE VVGKLLKMRQAFHSHPGTHCPSPAVKDPNTQSVGNPQRIGWPH FKEIFMLSALSQEDVKTLLKQYLLTQAQPGPWEYHSAVLT ETCANIIREKLLLEHLPOEVYVNVQKTA VWEEGPGGELVQK LVPKESYVVKLLIGPKGHVISQIAQEBAGHDLMDIFLCDVD IRLSV KLLK |
| 7016 | 167 | 2513 | ILNAPKPPPPRDSVEAVAARDTGGGSGWTGMDVSGQETDWRST AFRQKLVSQIEDAMRKAGVAHSSKSKDMESHVFLKAKTRDEYLS LVARLI IHFRDIHNKKSQASVSDPMNALQSLTGGPAGAGTGM PPRPGQSLGGMGSLGAMGQPMLSGQPPPGTSGMAPHSMVVS TATPQTQLQLQVAAAAAATARSSSSSSRRYSSSSSSNSKQ FQAQSSAMQ\QFQA\VVQQQQQL\QQQQQQQHILIKLHHQ QIQQQQQQLQRI AQLQLQQQQQQQQQQQQQALQAQPPIQP PMQPPPPPSQALPQQLQMHHTQHHPPPQPPQPPVQNPQPSQ LPPQSQTQPLVSQAQALPGOMLYTQPLKFRAPMVVQPPVQ QVQQQTAVQTAQAQMVAPGVQVSQSSLPMLSSSPSPGQVQTP QSMPPPPQSPQPGQSSQPNNSVSSGPAPSPSSFLPSPPQPF \QSPVTARTPQNFVSPSGPLNTPVNPSSVMSFAGSSQAEEQY LDKLLKLSKYIEPLRRMINKIDKNEDRKKDL SKMKSLLDILTDP SKRCPLKTLQKCEIALEKLNDAVPTPPPPVPPTKQYLCQP LLDAVLANIRSPVFNHSLYRTFVPAMTAIHGPPITAPVCTRKR RLEDDERQSIPSVLQGEVARLDPKFLVNLDP SHCSNNGTVHLC KLDDKDLPSVPPLLSVPADYPAQSLWIDROWQYDANPFLQSV HRCMTSRLQLPDKHSVTALLNTWAQSVHQAACLSAA |
| 7017 | 1 | 1785 | INLGNFCYMSVI*ALFMATDFRRQVLSLNLGNCNSLMKKLQHL FAFLAHTQREAYAPRIFFEASRPPWFTPRSQQDCSEYLRFLDDR LHEBEKILKVOASHKPSEILECSETSLQEVASKAVALTETPRTS DGEKTLIEKMFQGLRTHIRCLNCRSTSQAFAETDLSLAFWFS YSLEYMSCPDCSQSPSIQDGLMQASVPGPSEEFVYNYPTTAAF ICDSL VNEKTIGSPPNFEYCSENTSVPNESNKILVNKDVQKFG GETTPSVTDLLNYFLAPEILTDGDNQYVCENCASLQNAEKTMTIT EEPEYLLILTLRFSYDQKYHVRKILDNVSLPLVLELPVKRITS |

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|------------|--|--|--|
| | | | FSSLSESWSDVDFTDLSENLAKKLKPSGTDEASCTKLVPIYLLS SVVVHSGISSSESGHYYSYARNITSTDSSYQMYHQSEALALASSQ SHLLGRDSPSAVFEQDLENKEMSKWFLFNDSTRVFTTSFQSVQK ITSRFPKDTAYVLLYKKQHSNGLSGNNPTSGLWINGDPPLQKE LMDAITKDNKLYLQEQELNARARALQAASASCSPRPNGFDDNDP PGSCGPTGGGGGGGNTVGRVLP |
| 7018 | 484 | 1066 | SLVFRGNTWSGEAGHHCALFNLAAYHQLFVGTERIRAPEIIFQ PSLIGEEQAGIAETLQYILDRYPKDVQEMLVQNVFLTGGNTMYP GMKARMEKELLEMRPFRSSSQVQLASNPVLDWYGARDWALNHL DDNEVWITRKEYEEKGGEYLKEHCASNIYVPIRLPKQASRSSDA QASSKGSAAAGGGGAGEQA |
| 7019 | 1048 | 335 | APGGFLVTMVFPAPSPFWMLGCCSHEVTAGPPTLCKDMSALVAA RMRHPIPLAFGSDWRDLPNIEVRLSDGTMARKLRYTHDRKNGRS SSGALRGVCSVEAGKACDFAARQFNLIIPWCLPHTGNRNHWA GLYGRLEWDGFFSTVTNPEPMGKQGRVLHPBQHRVSVRECAR SQGFPTDYRLFGNILDKHRQVGNVPPPLAKAIGLEIKLCMLAK ARESASAKIKEEEAAKD |
| 7020 | 1 | 2154 | FADSKRKSVLDDKIKNLQVALTSKQOSLETAMSFVARNTFKRV NGFLMRKVAVFFSNTPTRASPQLREAVLKLSDAGITPLFLTRQE DRQLINALQINNTAVGHALVLPAGRDLTDFLENVLTCHVCLDIC NIDPSCGFGSWRPSFRDRRAAGSDVDIDMAFILDSEATTTLFQF NEMKKYIAYLVRQLDMSDDPKASQHFARVAVVQHAPSESDNAS MPPVKVEFSLTDYGSKEKLVDPLSRGMTQLQGTALGSAIEYTI ENVFESAPNPRDLKIVVLMLTGEVPEQQLEEAQVRILQAKCKGY FFVVLGIGRKVNIKEVYTFASEPNDVFFKLVDKSTELNEEPLMR PGRLLPSFSSSENAFYLSPIRQKQDWFGQDQPTKNLVKFGHKQ VNVPNVTSSTPSNTNPTVTTKPVTTTTPVTTTTPVTTTTPVTTI INQPSVKPAAAKPAPAKPVAAPVATKTATVRPPVAVKPATAAK PVAAPKPAVRPPAAAAAKPVATKPEVPRPQAAKPAATKPAATK MVKMSREVVQVEITENSARKLHWRPEPPGPFYDLTITSADQS LVLQNLTVTDRIVIGLLAGQTYHVAVCYLRSQVRATYHGSFS TKKSQPPPPQPARSASSSTINLMVSTEPLALTETDICKLPKDEG TCRDFILKWWYDPNTKSCARFWYGGCGGNENKFGSQKECEKVCA PVLAKPGVISVMGT |
| 7021 | 2 | 338 | VNAVSEFFPENGAFATGSDDATCRLFDLRADQELLYSHDNIICG ITSVAFSKSGRLLLAGYDDFN CNVWDTLKGDRAGVLAGHDNRVS CLGVTDDGMAVATGSWDSFLRIWN |
| 7022 | 2 | 856 | VYIGSFWSHPLLIIPDNKRLFEEAEQDLFRDIQSLPRNAALRKL DLIKRARLAKVHAYIISLKKEMPSVFGKDNKKSLVNNLAETIY GRIEREHQISPGDFPNLKRMDQLQAQDFSKFPPLSKSLLEVVD DMLAHDIAQLMVLVRQESSQRPIMVKGGAFFGTLHGPFHGYG EGAGEGIDDAEWVWARDKPMYDEIFYTLSFVVGKITGANAKKEM VRSKLPNSVLGKIWLADIDKDGMLDDDEFALANHLIKVLEGH ELFNELEPAHLLPPSKRKVAE |
| 7023 | 2 | 748 | AMVFGGVVPEYVPQYRDIRRTQADGFSTYVCLVLLVANILRILF WFGRRFESPLLWQSAIMILTMLMLKLCTEVRVANELNARRRSF TAADSKDEEVKAPRRSFLDFDPHHFWQWSSFSYVQCVLAFTG VAGYITYLSIDSALFVETLGFVAVLTEAMLGVPQLYRNHRHQST EGMSIKMVLMTSGDAFKTAYFLKGAFLQFSVCGLLQVLVDLA ILGQAYAFARHPQKPAHVAHPTGTAL |
| 7024 | 1207 | 190 | RTGVTGVVAQVVMFSGGVLSGGEQLQMPVKPERGLGPSDGLV SSRRGSPGTVLGLFPWLLTPVLVSRISRMILLTRSPATAWHRLS QLKPPVLPCTLGGQALHLRSWLLSRQGPATGGGQPGQFGLRT RLLTGLFAGLGGAWLALRAEKERLQQQKRTALRQAAGVQGD FHLLDHRGRARCKADFRGQWVLMYFGFTHCPDICPDELEKLVQV VROLEABPGLPPVQPVFITVDPERDDVEAMARYVQDFHPRLLGL |

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|------------|--|--|---|
| | | | TGSTKQVAQASHSYRVVYNAGPKDEDQDYIVDHSIATYLLNPDG LFTDYVGRSRAEQISDSVRRHMAAFRSVLS |
| 7025 | 232 | 832 | ERNSPIGNENL*K\HSLDCLCFRGDWEGNTQFOTLQDNQBECE KQVIRTEKRPFTFNQHTVFNHQRINTGDKLNEFKELGKAFISG SDHTQHQLIHTSEKFCGDKCEGNTFLPDSEVIQYQTVHTVKTKY ECKECGKSFSLSRLSTGHKRIHTGEKPKCKDCGKAFFHSQLS VHKRIHTGEKSYECKECGKAFSCG |
| 7026 | 328 | 1146 | NPNPISGDIKDIIKAAKSMIDPAKSHFHPVTPSLVFLCFIFDG LHQALLSVGVSKRSNTVVGNNENEERGTPYASRFKMPNFIALEK SSVLRHCCDLLIGVAAGSSDKICTSSLQVQRRFKAMMASIGRLS HGESADLLISCNAESAIGWISSRPWVGELMFTFLFGDFESPLHK LRKSS*LPRKHR*QPINAVRMFLDQCMDGSIALRAIVSEIPVFE EKKNG*KGIGEIF*VWGCTLPHYWGAVTNVPKLSNSGKLLG QDEQPHIFG |
| 7027 | 43 | 954 | GRRLQQQRPEDAEDGAEGGGKRGEGWEGGYPEIVKENKLFEH YYOELKIVPEGEGWQFMDALREPLPATLRITGYKSHAKEILHCL KNKYFKELEDLEMDGQKVEVPQPLSWYPEELAWHTNLSRKILRK SPHLEKFHQFLVSETESGNISRQEAIVSMIPPLLNVPRPHKILD MCAAPGSKTTOLIELMHADMNVPFPEGFVIANDVDNKR CYLLVH QAKRLSSPCIMVNHDASSIPRLQIDVDGRKEILFYDRILCDVP CSGDGTMKNIDVWKWTTLSLQHLGLQLRIATRGAEQL |
| 7028 | 189 | 608 | SRPPEPEPGTMEKGSDDSSSEKGGVPGTPTSTQSLGSRNFIRNS KKMQSWYSMLSPTYKQNRNEDFRKLFKSLPEAERLIVDYSCALQR EILLQGRLYLSENWICFYSNIFRWETTISIQLKEVTCLKKEKTA KLIPNAIQ |
| 7029 | 1343 | 40 | VLESNTEAKQATGTSSKLRHGTGQKRGEGPRCPFSGLAQLRLWG /PCPHAGRETGPASAPIPGS*GHGWHW*RKDGRGERSEGPSAL SPHSFSLNMQQAPTHVGPGMGSGRPRSSVVEQVGVGSQLSRE RWRA*RSPLGAAASERTEMTKERSP/RPCQGYDSSNWFTQPGKK TRKRNSRRNTMVSRRGGCLLYPLQSIMPE*QLR*GAHASPTQG R*GKGGRPSPLTKASGTHIPTPFPGSIP/RPTRDSGEGTDSN\ AAPGQKRGHREA*QGPEPV/WGRVTTHLQGPAG*TKPLGS\RNW VPGPAEGEGEGAGLEGRP*PLKGRSTLTFSPLSIPMVGKKP PEGTTASFFP\RSCHSE*RKPPSPCPHAPALSLPHLEPLPLPL PLPLPGAGT*HSARSGRPGQSETGSLCHNCHCPCPHCKCSPGG T |
| 7030 | 2 | 521 | FVCFSAFGSGQGGKRRVNMELSAVGERVFAAEALLKRRIRKGRM EYLKWKWGSQKYSTWEPEENILDARLLAAFEEREREMELYGPK KRGPKPKTFLKQAQAKAKTYEFRSDSARGIRIYPGRSPQDL ASTSRAREGLRN\RVCPRQRAAPAPAP\PRRGPSGPGPRPG*G PGLHFGPGGPGSKHGFVPASEQHQQHQLPRRGPSGPGPRPG |
| 7031 | 960 | 59 | HCSVPGAWEPRKPPAQICPQLTSRPHLSRSLSPGCGHSPGPG /CKPS/RHCDLHEGSPSRTAALFCGKPPQKHGVECG/PCPCLA PRLTEPPALTVSPVGRAPAGAL*PSGRACSACSHRLAPEAAL SAAAPRPSLGSQNASGLFAASLPPQDSSQPHKTVPSPARSVPP LGAQARAAPPRLWCPRALVSG*EASPEAVSVAAGEPPVPGTPTST SGSTASHSRRC*SPR*TPAPRRDHGRSAFEVLTAAASAQPC ASQGGPRPTGAGRTSPGLPLPSRGPPAASARPPCRHPSL |
| 7032 | 1393 | 2104 | RRPGRTEPVEPPPPPPFRASNSKSRCR*RNHLAPL*QSPLRK SRIGTSSLFPGRSAGERPRPAATFCLSRGGSSPVFL*PSSSSL EPWMKQFGRHLHSLFWKSWQKMSPLLTPLKDLTSLMSGWRYRQR LPLHTFLKKSQMASLAPLPTAPLASSLPPPPGPPPLLEPV PLA*LSRSGILVPPNSGFSLSL\PLGDH*GSSGEVRGSCGSPPP HHCWVLPPLPP*LLPPR |
| 7033 | 689 | 815 | RSRDCLSSSATSNRRRSKCSGPKRATPLDSGPGP*APPGPSSA |

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|------------|--|--|--|
| | | | LMPSSCPWRTGALGPSAGSRALGRCTSSVGPGRWLTRTSSP GCATRIWRTMRMEPRPLRSRMGESAPGIPAEPLSAAPSGPSAPS AAAPSAPTTPAAAGPNTL*SRRTAEWCWPPSCSCCWGWC*SWSA WDWRRPPLQVSPAPSSSCRASCCWCLESIT*SSSTARSRATGAS SSSTCPTSRSDRGAAWTP\SPMGAPLLPCSVPLISREBALQDPR NPSP*GVCSSGSGHAGLALGKPPVACSVF |
| 7034 | 92 | 1942 | EDTSSMPFRLLIPLGLLALLPQHGGAPGPDGSAFPAHYRERV KAMFYHAYDSYLENAFFDELRLPLTCDGHDWGSFSLTLIDALD TLL\TLFYFQILGNVSEFQRVVEVLQDSVDFDIDVNASVFETNI RVVGGLLSAHLLSKKAGVEVEAGWPCSGPLLRMAEEAARKLLPA FQTPTGMPYGTVNLLHGVNPGETFPVCTAGIGTFIVEFATLSSL TGDPVFEDVARVALMRLWESRSDIGLVGNHIDVLTGKWVAQDAG IGAGVDSYFEYLVKGAILLQDKKLMAMFLEYNKAIRNYTRFDDW YLWVQMYKGTVMMPVFQSLAYWPGQLSLIGDIDNAMRTFLNYY TVWKQFGGLPEFYNI PQGYTVEKREGYPLRPELIESAMLYRAT GDPTLLELGRDAVESIEKISKVECGFATIKDLRDHKLDRNMFESF FLAETVKYLYLLFDPTNFIHNGSTFDAVITPYGECILGAGGYI FNTEAHPIDPAALHCCQRLKEEQWEVEDLMREFYSLKRSRSKPKQ KNTVSSGPWEPPARPGTLFSPENHDQARERKPAKQKVPLLSCPS QPFTSKLALLGQVFLDSS*PLDNFFIFIFLRLNYNKLLLAIIKK K |
| 7035 | 92 | 1942 | EDTSSMPFRLLIPLGLLALLPQHGGAPGPDGSAFPAHYRERV KAMFYHAYDSYLENAFFDELRLPLTCDGHDWGSFSLTLIDALD TLL\TLFYFQILGNVSEFQRVVEVLQDSVDFDIDVNASVFETNI RVVGGLLSAHLLSKKAGVEVEAGWPCSGPLLRMAEEAARKLLPA FQTPTGMPYGTVNLLHGVNPGETFPVCTAGIGTFIVEFATLSSL TGDPVFEDVARVALMRLWESRSDIGLVGNHIDVLTGKWVAQDAG IGAGVDSYFEYLVKGAILLQDKKLMAMFLEYNKAIRNYTRFDDW YLWVQMYKGTVMMPVFQSLAYWPGQLSLIGDIDNAMRTFLNYY TVWKQFGGLPEFYNI PQGYTVEKREGYPLRPELIESAMLYRAT GDPTLLELGRDAVESIEKISKVECGFATIKDLRDHKLDRNMFESF FLAETVKYLYLLFDPTNFIHNGSTFDAVITPYGECILGAGGYI FNTEAHPIDPAALHCCQRLKEEQWEVEDLMREFYSLKRSRSKPKQ KNTVSSGPWEPPARPGTLFSPENHDQARERKPAKQKVPLLSCPS QPFTSKLALLGQVFLDSS*PLDNFFIFIFLRLNYNKLLLAIIKK K |
| 7036 | 442 | 761 | CLAPLFSCFQIINLHLPASGRLRWAWLRGPGRN*LPGEGPSIPT RNW*ERKAGCSQPC/PAQQHGRPPGVSPLPDRDPHTTLRPLPP PPPPPPPPRRPPRRNRPG |
| 7037 | 442 | 761 | CLAPLFSCFQIINLHLPASGRLRWAWLRGPGRN*LPGEGPSIPT RNW*ERKAGCSQPC/PAQQHGRPPGVSPLPDRDPHTTLRPLPP PPPPPPPPRRPPRRNRPG |
| 7038 | 155 | 891 | GAGAASDMSSGLRAADFPRWKRHISEQLRRRDRLQROAFEEIIL QYNKLEKSDLHSVLAQKLQAEKHDPNRHEISPGHDGTWNDNQ LQEMAQLRIKHQBELTELHKKRGELAQ\RVIDLNNQMQRKDREM QMNEAKIAECLQTI SDLETECLDLRTKLCDLERANQTLKDEYDA LQITFTALEGKLRKTTEENQELVTRWMAEKAQEANRLNARE*KR LQEAASPAERACRSSKGTSTSTRTG |
| 7039 | 155 | 891 | GAGAASDMSSGLRAADFPRWKRHISEQLRRRDRLQROAFEEIIL QYNKLEKSDLHSVLAQKLQAEKHDPNRHEISPGHDGTWNDNQ LQEMAQLRIKHQBELTELHKKRGELAQ\RVIDLNNQMQRKDREM QMNEAKIAECLQTI SDLETECLDLRTKLCDLERANQTLKDEYDA LQITFTALEGKLRKTTEENQELVTRWMAEKAQEANRLNARE*KR LQEAASPAERACRSSKGTSTSTRTG |
| 7040 | 34 | 789 | KITPPRRPHRCSSGHGSDNSSVLSGELPPAMGKTALFYHSGSS GYESVMRDSEATGSASSAQDSTSENSSSVGGRCRSLKTPKKRSN |

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|------------|--|--|--|
| | | | PGSQRRRLIPALSLDTSSPVRRKPPNSTGVRWVDGFLRSSPRGLG EPFEIKVYEIDVERLQRRRGASKEAMCFNAXLKILEHRQQRI AEVRKYEWMKELEATKQYLMLDPNKWLSEFDLEQVWELDSLE YLEALECVTERLESRVNFCKAHLMMITCFDIT |
| 7041 | 1 | 567 | SGRVAMGRRRAPAGGSLGRALMRHQTRSRSHRTDSWLHTSEL NDGYDWGRNLNLSVTEQSSLDLFLATAELAGTEFVAEKLNIKFV PAEARTGLLSFESQRIKKLHEENKQFLCIPRRPNWNQNTTPEE LKQAEKDNFLEWRRQL\VRLEEEQKLILTPFERNLDFWRQLWRV IERSDIVVQIVDA |
| 7042 | 7 | 345 | PIHMAAALRADIT\TSPFPFIQGYLLLSASHG\ATSLHTKGAL PLETVMYTVIPKSKYVLVKPDTQYPYSENLEDFKRLAENSASN DLLLMAEVAISDYDGDKLTLELREKY |
| 7043 | 2 | 2170 | ARGMAARDSSEEDLVSYGTGLEPLEEGERPKKFTPLQDQTVRD EKGRYKRFHGFAGSGGFSAGYFNTVGSKEGWTPSTFVSSRQNRAD KSVLGPEDFMDEEDLSEFGIAPKAIUTDDFASKTKDRIREKAR QLAAATAPIPGATLLDDLTIPAKLSVGFELLRKMGWKEGGVGP RVKRRPRRQKPDGPKIYGCALPPGSSESGEGEDDYLDPNVTF APKDVTPVDFTPKDNVHGLAYKGLDPHQALPGTSGEHFNLFSGG SERAGDLGEIGLNKGRKLGISGQAFVGVALEEDDDIYATETLS KYDTVLKDEEPGDGLYGTAPRQYKQKSEKDLRYVGKILDGF SLASKPLSSKKIYPPPELPRDYPVHYFRPMVAATSENHLLQV LSSESAGKATPDGTHSKHQLNASKRAELLGETPIQGSATSVLEF LSQDKKERIKEMKQATDLKAAQLKARSLAQNAQSSRAQSPAA AGHCSSWNMALGGGTATLKASNFKPKAKDPEKQKRYDEFLVHMKQ GQKDALERCLDPSMTEWGRGRERDEFARAALLYASSHSTLSRF THAKEEDSDQEVPRDQENDVGDKQSAVKMMKMGKLTDRDTEW HPDKLLFQ/RLVGLPRVKRDKYSVFNFLTLPETASLPTQASSE KVSQHRGPDKSRKPSRWDTSKHEKKEDSISEFLRLARSKAEPPK QQSSPLVNKEEHAPELSAN |
| 7044 | 276 | 734 | EVYLTDEFAKGRKVADLYELVQYAGNIIPRLYLLITVGVVYVKS FPQSRKDLKDLVEMCRGVQHPLRGLFLRNYLLQCTRNILPDEG EPTDEETGDISDSMDPVLNFAEMNKLWVRMQHGHSDREKR ERERQELRILVGTNLVRLSQV |
| 7045 | 3 | 513 | LGFKMEALSRAQEMSIALKQHDPIYTSIADLTGQVALYTFCP KANQWEKTDIEGTLFVYRRSASPYHGFTIVNRLNMHNLVEPVNK DLEFQLHEPFLLYRNASLSIYSIWFDKNDCHRIAKLMADVVEE ETRRSQQA/RSCQTESQPGQWLQRPQAHHPGDAEQSQG |
| 7046 | 3 | 513 | LGFKMEALSRAQEMSIALKQHDPIYTSIADLTGQVALYTFCP KANQWEKTDIEGTLFVYRRSASPYHGFTIVNRLNMHNLVEPVNK DLEFQLHEPFLLYRNASLSIYSIWFDKNDCHRIAKLMADVVEE ETRRSQQA/RSCQTESQPGQWLQRPQAHHPGDAEQSQG |
| 7047 | 103 | 486 | QMKIEKCGWSEGLTSIKGNCHNFYTAISKDVITYKELKNLLNSKN IMLIDVREIWEILEYQKIPESINVPLDEVGEALQMNPRDFKEKY NEVKPSKSDS/IVFSYLAGVRSKKALDTAISLGFHSYYER |
| 7048 | 92 | 627 | FFCLTLLSSWDYRHHATRVRVSSPVFTMEDSGKTFSSSEEEANY WKDLAMTYKQRAENTQEELREFQEGSREYEAELETQLQQIETRN RDLSENRLRMELETIKEFEVQHSEGYRQISALEDDLAQTKA IKDQLQKYIRELEQANDDLERAKRATDHGLSKTFE\QRLN\QAI EKKW |
| 7049 | 393 | 938 | KRTGSASVGGPPFGLGGPATXASVAGRCSSVGKI PARRCYEDEL VPVFEAVGRIYELRLMMDPDGKNRGYAFVMYCHKHEAKRAVREL NNYEIRPGRLLGVCCSVNCRFLFGGIPKMKKREEILEETAKVT EGVLDVIVYASAADKMKNRGLRLRGVREPPRGCHWLGRKLIAXW ASSLWG |
| 7050 | 393 | 938 | KRTGSASVGGPPFGLGGPATXASVAGRCSSVGKI PARRCYEDEL |

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|------------|--|--|--|
| | | | VPVFEAVGRIYELRLMDFDGNRGYAFVMYCHKHEAKRAVREL NMYEIRPGRLLGCCSVNCRFLFIGGIPKMKKEEILEEIAKVT EGVLDVIVYASAADKMKNRGLRLRGVREPPRGCHWLGRKLIAXX ASSLWG |
| 7051 | 119 | 816 | KKMNLAEICDNAKKGREYALLGNYSMSVYQGVMOQIQRHCQS VRDPAIKGKQVQVRELLEEEYQVKSIVGTLESFKIDKPPDFPV SCQDEFFRDPAVWPPVPAEHRAPPQIRR/RQSRSKTSEERNGR SRSPGTCRPST\PISKSEKPESTSRDKDYRARGRDDKGRKNNMQDG ASDGEMPKFDGAGYDKDLVEALERDIVSRNPSIHWDIADLEEAA KKLLREAGVLPMMW |
| 7052 | 467 | 715 | SCPGRGKMSKLLNPEEMTSRDYFFDSYAHFGIHEEMLKDEVRTL TYRNSMYHNKHVFKDKVVLVDVSGGTGILSMFAARQGPFR |
| 7053 | 467 | 715 | SCPGRGKMSKLLNPEEMTSRDYFFDSYAHFGIHEEMLKDEVRTL TYRNSMYHNKHVFKDKVVLVDVSGGTGILSMFAARQGPFR |
| 7054 | 1 | 1036 | GTSQSRRETDAARRRSAGAEPTARLPWPAALAEWSPCEPLGFG RRCRWDAEMEYDEKLARFRQAHLNPFNKQSGPRQHEQGPGEEVPD VTPPEALPELPPGPEPEFRCPERVMDLGLSEDFHSRPVGLFLASD VQQLRQAIEECKQVILELPEQSEKQKDAVVRILHLRLKLQELKD PNEDEPNIRVLEHRFYKEKSKSVKQTCDCRCNTIIWGLIQTWYT CTGCYRCHSKCLNLISKPCVSSKVSQAELNICPETGLDSQ DYRCAECRAPI/CS/DGVVPSEARQCDYTGQYYCSHCHWDLAV IPARVHNWDFEPRKVSRCMSRYLALMVSRLVRLREIN |
| 7055 | 2 | 527 | DSRRVSWRSWLANE/WGKHLCLFIWLSMNVLFWKTFLLYNQGF EYHYLHQMLG/ALCLSRASASVLNLCNLILLPMCRITLLAYLRG SQKVPSSRRTRRLDKSRTFHITCGATICIFSGVHVAHLVNALN FSVNYSEDFVELNAARYRDEDPKRLFTTVPGLTGVCMEVVLFL M |
| 7056 | 2 | 527 | DSRRVSWRSWLANE/WGKHLCLFIWLSMNVLFWKTFLLYNQGF EYHYLHQMLG/ALCLSRASASVLNLCNLILLPMCRITLLAYLRG SQKVPSSRRTRRLDKSRTFHITCGATICIFSGVHVAHLVNALN FSVNYSEDFVELNAARYRDEDPKRLFTTVPGLTGVCMEVVLFL M |
| 7057 | 1368 | 431 | GIYLVNEKIFRPTCIGDRQENDKENLNLENHRDQELLHASCOA SGEVPSQASLRGFFTEDEPGCFEGENLPEALQNIQDEGTGEQL SPQERISEKQLGQHLPNPHSGEMSTMWLEEKRETSQKQPRAPM AQKLPTCRECGKTFYRNSQLIFHQRTHGTETYFQCTICKKAFLR SSDFVKHQRTHTEKPKCKDCYCGKGFSDFGSLRHHKIHTEGEP YKCPICEKSFQSRNFRNRHQRVHTGEKPYKCSHCGKSFWSSSL DKHQRSHLGKKPFQ*PVTKLSFPISISQPSHKNTQLHQEELCLR GYPC |
| 7058 | 1 | 469 | FSGFGAVPDALGCRMSDLRITEAFLYMDYLCFRALCCKGPPPAR PEYDLVCIGLTGSGKTSLLSKLCSSEPDNVVSTTGFSIKAVFPQ NAILNVKELGGADNIRKYWSRYQSGQGVIFVLDASSEDDELEA ARN*SCQTLLQHPQLCTLPFLILA |
| 7059 | 1 | 1178 | WPAFRQPAAMADALLGTGFRARGCLGAAGPTSSGRAARTFA APWARPSAWLECVVTFDLELQALELVYPNDFRLTDKEKSSI CYLSFPDSHSGCLGDTQFSFRMRQCGGQSPNHADDRHYNRAP VALQREPAHYFGYVYFRQVKDSSVKGYPQKSLVLVSRLPFVRL FQALLSLIAPEYFDKLAPCLEAVCSEIDQWPAPAPGQTLNLEVM GVVVQVRIPSRVKSESSPPKQFDQENLLPAPVVLASVHELDLF RCFRPVLTHMTLWELMLLGEPLLVLPSPDVSSEMVLAITSCL QPLRFCCDFRPYFTIHDSEFKETTRTQAPPNVVLGVNTNPFKIK TLQHNPHILRVGEPKMSGDLPKQVKLKKPFKV*RPWDTKP SVNLPPSLWPNEEAMDSTKSEPLKGSPEADGNIYKKLNVNPSQ YRFEHLVTQMKWRLQEGRGEAVYQIGVEDNGLLVGLAEEMRAS |
| 7060 | 90 | 1670 | |

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|------------|--|--|--|
| | | | LKTLHRMAEKVGADITVLREREDVDSDMPRKITEVLVRKVPDN QQFLDLRLVAVLGNVDSGKSTLLGLVLTQGLDNGRGRARLNLRH LHEIQSGRTSSISFEILGFNSKGEVHGINGTQWGQTLRMGW*** RT*DGGRVWRLEIV*MNALRGL*TSSAPLRKSMGNQLN*IKNG VKIKRQGHGPNGLPGNSEGVGRAGRHR*GPWALGQVVNYSDDR TAEIICESSSKMITFIDLAGHHKYLHTTIFGLTSYCPDCALLV SANTGIAGTTREHLGLALALKVPFFIVVSKIDLCATTVERTVR QLERVLKQPGCHKVPMVLTSDDAVTAAQQAQSPNVTPIFTLS SVSGESLDLLKVFNLPLPLTNSKEQBELMQQLTEFQVDEIYTV PEVGTUVGGTLSR*IDLLATLPTQPSPIYSKTSWPKGGDEGI |
| 7061 | 364 | 710 | ARMPSPLGPPCLPVMDETTLEPETARLRFRCGYQEVAGPRE ALARLRELCCQWLQPEAHSKEQMLEMLVLEQFLGLTPPEIQAW RGQRPGSPPEAAALVEGLQHD*ARMPSPLGPPCLPVMDETTL EEPETARLRFRCGYQEVAGPREALARLRELCCQWLQPEAHSKE QMLEMLVLEQFLGLTPPEIQAWVRGQRPGSPPEAAALVEGLQHD PGQLLG |
| 7062 | 71 | 744 | AKAGTNLRRLHWSYFFCTPKHKLKSSQKDKVRQFMACTQAGER TAIYCLTQNEWRLEADTSFFQNPDSLHRESMRNAVDDKKLERL YGRYKDPQDENKIGVDGIQPCDDLSLDPASISVLVIAWKFRRA TQCEFSRKEFLDGMTBLGCDSEKLLKALLPRLEQELKDTAKFKD FYQFTFTPAKNPGQKGLDL*MAGAYNKLVLSSGRFKFLYLWNTPL MEHH |
| 7063 | 2 | 562 | LRTVPDLPGRRFRAMRTGQRR*PELPPDMNSLEQAECLKAFERR LLEYHCLQPATGRWRMLLIVVSVCTATGAWNWLIDPETQKVSF FTSLWNHPPFTISCITLIGLFFAGIHKRVVAPSIIAARCRTVLA EYNMSCDDTGKLLKPRPHVQ*QSSLIVMGLKIAFLRISDTAKS HKGFLRLRLDM |
| 7064 | 300 | 884 | RDTGSDPSSTRRLCSTCCTGH*PAEPIASPHPSRGTCFPASSAS SRRTGCWTCPPESGHAQARRSRASASRWGARGAVRSAAARGC SSRAGRWLETPGRRRGPPACAAAAGRLRGFPAP*AAPPTASVPA RCRPAARTGAPAAATWLRRLSGLRAPALGRRRSPGPSPKSAAP PLLTPLGAGRAGSSRANS |
| 7065 | 1 | 555 | ATTHSARRSGRGAEEAAASAGGRQKGFDRKAWEGRRRTTGG RSQSEPKAPPPQKRSEAAAFASMAHSPVAVQVPMQNNIADPEEL FTKLERIGKSGPGEVFKGIDNRTQQVVAIKIIDLEEADEIEDI QQEITVLSQCDSSYVTKYGYSLKSKLWIIIMEYLGGSALDLL RAGFFDEFQ |
| 7066 | 356 | 676 | PGPQRGPWRAREGGHPLDPAHPRAPASLRNSVRAATMMQICDT YNQKHSLENAMNRFICAVNNMDQTMVPSLLRDVPLADPGLDND VGVEVGSGGCGLEERTFP |
| 7067 | 152 | 973 | KENITMATEIGSPPPFFHMERFOHQAPROLFYKRPDFAQQQAMQ QLTFDGKMRKAVNRKTIDYNPSVIKYLENRIWQRDQDRMRAIQ PDAGYYNDLVPPIGMLNPMNAVTTKVRTSTNKVKCPVFWVRW TPEGRRLLVTGASSGEBFTLWNGLTFFNFETILQAHDSPVAMTWSH NDMWMLTADHGGYVKYQSNMNNVVKMFQAHKEAIREARFIHNIP FSVVPPIVMVKLFSKCILGAEMHGLCQPLGNFLHPINTIFFVFVT HSFFCNAPF |
| 7068 | 222 | 816 | DTMKEYVLLFLALCSAKPFFSPSHIALKNMMLKDMEDTDDDD DDDDDDDDDDNSLEPTREPRSHFFPDLFFMCPFGCCQYSRV VHCSDLGLTSVPTNIPFDTRMLDLQNNKIKEIKENDFKGLTSLY GLILNNKLTIKIHPAFLTTKKLRLYLSSHNLSEIPLNLPKSL AELRIHENKVKKIQKDTFKKK |
| 7069 | 1147 | 1765 | FRDHRRYFYVNEQSGESQWEFPDGESEESQAQENRDETAKQ TLKDKTGTDSNSTESSETSTGSLCKESFSGQVSSSLMPLTPFW TLLQSNVPVLQPLPLEMPPPPPPPPPPPPPPPPPPPPPPAPKMP |

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|------------|--|--|---|
| | | | EKTKKGRKDKAKKSKTKMPSLVKKWQSIQRELEEDNSSSSSEED RVSTAQKRIEENKQQQLVSGMAERNANFEA |
| 7070 | 1 | 547 | DGTWEDSEAVQRATALIEQRLAQEEENEKLRGDARQQLPMDLLV LEDEKHHGAQSAALQKVKGQERVRKTSLOLRREIIDVGGIQNLI ELKKRKQKKRDALAASHEPPPEPEEITGPVDEETFLKAAVEGK MKVIEKFLADGGSADTCDFRRTALHRASLEGHMEILEKLLDNG ATVDFQ |
| 7071 | 2 | 921 | ARGTLRALETAKKVGKVGANGQKAAGPSADSVTENKIGSPFKTP VSNVAATSAGPSNVGTELSVPOKSSPFLTRVPAYPPHSENIQY FQDPRTQIPFEVPQYPQTGYPPPTVPAGVAPCVPRFVRSNNV PESSLPASMPYADHYSTFSRDRMNSSPYQPPPPQPYGVPVPV PSQMYAPVYDSRRIRWPPMYQRDDIIRSNSLPPMDVMHSSVYQT SLRERYNSLDGYYSVACQPPSEPRTTVPLPREPCGHLKTSCEEQ IRRKPDQWQAQYHTQKAPLVSSSTLPVATQSPPTPSTLNRGEES |
| 7072 | 2 | 921 | ARGTLRALETAKKVGKVGANGQKAAGPSADSVTENKIGSPFKTP VSNVAATSAGPSNVGTELSVPOKSSPFLTRVPAYPPHSENIQY FQDPRTQIPFEVPQYPQTGYPPPTVPAGVAPCVPRFVRSNNV PESSLPASMPYADHYSTFSRDRMNSSPYQPPPPQPYGVPVPV PSQMYAPVYDSRRIRWPPMYQRDDIIRSNSLPPMDVMHSSVYQT SLRERYNSLDGYYSVACQPPSEPRTTVPLPREPCGHLKTSCEEQ IRRKPDQWQAQYHTQKAPLVSSSTLPVATQSPPTPSTLNRGEES |
| 7073 | 50 | 504 | LAHGSFGVSDFFAPAAAPAHLTLSFSGSLSPQFRKPLGRAPAMP LVRYRKVVILGYRCVGKTSLAHQFVEGEFSEGYDPTVENTYSKI VTLGKDEPHLHLVDTAGQDEYSILPYSFIIGVHGVLVYSVTSL HSFQVIESLYQKLHEGHGK |
| 7074 | 263 | 1003 | VCPVLCSTRQEPGHSSLVTFYFGKPTRRKEFLGHCIAGKMNIS VDLETNYAELVLDVGRVTLGENSRKKMKDKCKLRKKQNERVSRAM CALLNSGGGVKAEIENEDYSYTKDGIGLDLENSFSNILLFVPE YLDFMQNGNYFLIFVKSWSLNTSGLRITTLSSNLYKRDITSKV MNATAALEFLKDMKTRGRILYLRPELLAKRPRVDIQEENMKAL AGVFFDRTELDREKELTTFESTHVEI |
| 7075 | 598 | 1005 | NYINFFRKEYPFHVQKVEINPVRLSRLQGVIRIMKTEESSEQ VEPEIKRKVQKRCSTYQPTPLSPASKKCLTHLEDLQRNCRQ AITLNESTGPLLRTSIHQNSGGQKSQNTGLTTKKFYGNVVEKVP IDII |
| 7076 | 279 | 1049 | LQESSNAAEGNEQRHEDEORSKRGGSWKGKRRKKPLRDSNAPK SPLTGYVRFMNERREQLRAKRPEVPFPEITRMLGNEWSKLPPPE KORYLDEADRDKERYMKELEQYQKTEAYKVSRTQDRQKGKSH RQDAARQATHHEKETEVKERSVFDIPIFTEFLNHSKAREAL RQLRKSNMFEERNALQKHVESMRTAVEKLEVDVIQERSRNTV LQOHLLETLRQVLTSSFASMPLEXPGETPTVDTIDSYM |
| 7077 | 3 | 1119 | SSMGNSSEINGLALRKTDKYGFLLGGSQYSGSLKSSIPVDVARQR ELKWLDMFSNWDKLSRRFQVKLCRCRKGIPSSLRKAWQYLSN SKELLEQNPRKFEELERAPGDPKWLVDVIEKDLHRQFPFHEMFAA RGGHGGQDLYRILKAYTIYRPDEGYCQAQAPVAAVLMHMPAEQ AFWCLVQICDKYLPGYYSAGLEAIQLDGEIFFALLRRASPLAHR HLRQRIDPVLMTWFMCI FARTLPWASVLRVWDMFFCEGVKI IFRVALVLLRHTLGSVEKLRSCQGMVETMEQLRNLPOCCMQEDF LVHEVTNLPVTEALIERENAAQLKKWRETRGELQYRPSRRLHGS RAIHEERRRQPPPLGPSSS |
| 7078 | 483 | 767 | FQQRMMAGEQKPSNNLEQFILLAKGTSGSALTALISQVLEAPG VYVFGELLELANVQBELAEGANAAYLQLLNLFAYGTYPDYIANKE SLPELY |
| 7079 | 2 | 376 | SVVEFKRPKEPSGSDGESDGFIDVGQEGQLSQMARPLSTPSSSQ MQARKKRRGIIEKRRDRINSSLSLRLRLVPTAFKQGGSKLEK |

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|------------|--|--|--|
| 7080 | 200 | 595 | AEVLQMTVDHLKMLHATGGTGTTHALLFQASFIQOIF VQLPLEAPCLSLSCRDHSGGNRDLRRHRDCRVYSGPDGIPY LTHPLCHQDVSVGRLQIRALATPGHTQGHVYLLDGEPIYKGPS CLFSGDLLFLSGCGEFPKREELGEEGETEVRATVPWRALKP |
| 7081 | 213 | 506 | AVTEEMILNLSLSLCYHNKILAPMVRVGTLEMRLLALDVGADI VYCEELIDLKMIQCKRVVNEVLSTVDFVAPDDRVRVFTCEREQN RVVFQMGTS |
| 7082 | 3 | 1137 | APSRNTMLMAWCRGPVLLCLRQGLGTNSFLHGLGQEPFEGARSL CCRSSPRDLRDGEREHEAAQRKAPGAESCPSLPLSISDITGCL SSLENLRLPTLREESSPRELEDSSGDQRCGPTHQGSSEDPMSLS QAQSAETEVEERHVSPCSSTRERPFQAGELILAEETGETKFKK LFRLNNFGLLSNWCAPVPGKIVGKFPQGIILRSSFGKQYMLRRP ALEDYVVLKRGTAITFPKIDNMLSMMDINPGDITVLEAGSGSG GMSLFLSKAVGSGGRVISFEVRKDHDLAKKNYKHWRDSWKLH VEEWDNDVDFIHKDISGATEDIKSLTFDAVALDMLNPHVTLVPV YPHLKHGGVCPVYVNNITQVIELLD |
| 7083 | 115 | 541 | RSNAVQLTRMEYAMKSLSLYPKSLSRHVSVRTSVVTQQLSEP SPKAPRARPCRVSTADRSVRKIMAYSLEDLLKVRDTLMLADK PFPLVLEEDGTTVETBEYFQALAGDTVMVLQKGQKQWPPSEBQ TRHPLSLSHK |
| 7084 | 3 | 522 | NSVSVSQSRLASVPGTGVQSAADMAASTAGKQRIKPVAK VKNKAPAEVQITAEQLLREAKERELELLPPPPQKIDDEELND YKLRKRKTFEDNIRKNRTVISNWKIYAQWEESLKEIQRARSIE RALDVDYRNITLWLKYAEMEMKNRQVNHARNIWDRAITTL |
| 7085 | 243 | 1499 | RQLARLRRRGWRSPFGGAPMAHITINQVLOQVYEADSRDASC AELVSFKHPHVANPRLQMASPEEKCCQVLEPPYDEMFAHLRCT YAVGNHDFIEAYKQCTVIVQSFLRAFOAHKEENWALPVMYAVAL DLRVFANNADQQLVKKGSKVGDMLEKAAELLMSCFRVCASDTR AGIEDSKKGMFLFLVNLQFKIYFKINKLHLCKPLIRADSSNLK DDYSTAQRVTYKYVGRKAMFDSDFKQAEYLSFAFEHCHRSSQ KNKRMILYLLPVKMLLGHMPTVELLKKYHLMQFAEVTRAVSEG NLLLLHEALAKHEAFFIRCGIFLILEKLLIITYRNLEKKVYLL KTHQLSLDAFLVALKFMQVEDVDIDEVQCILANLIYMGHVKGVI SHQHQQLVVSQNPFPPLSTGC |
| 7086 | 256 | 525 | TLAARMGKQNSKLRFVMDLLESTDFTEHETQEWYKGLRDCP SGHLSMEEFKKIYGNFFPYGDASKFAEHVFTFDANGOGTIDFR EF |
| 7087 | 166 | 723 | LSGSSAGKVAAPCVPPSNHELVPITTENAPKNVVDKGEASRGG NTRKSLDNGSTRVTPSVQPHLQPIRNMSVSRMTEDSCELDLY VTERIIAVSFPSTANEENFRNLREVAQMLKSKHGGNYLLFNLS ERRPDITKLHAKVLEFGWPDLHTPALEKICISICKAMDTWLNHP HRCRVLHNKG |
| 7088 | 104 | 759 | GTSASPSSLLEMAEITETGELYSSYVGLVYMFNLIVGTGALT MPKAFATAGWLVSLLVFLGFMSPMTTTFVIEAMAAANAQLHW KRMENTKEEDDDSSASDSVLIIRDNYERAERKRPILSVQRGS PNPFEITDRVBMGQMASMFFNKVGVNLFYFCIIVYLYGDLAIYA AAVFPFSLMQVTCATGNDSCGVEADTKYNDITRCWGPRLRRVD |
| 7089 | 33 | 1775 | SVCWEDRYLKARMEESFLSRAPSRGGVNFNLNVRTYIPNTKVEC HYTLPPGIMPASDWIGIFKVEAACVRDYHTFWSSVPESTTDG SPIHTSVQFQASYLPKPGAQLYQFRYVNRQGGVCGQSPFPQFRE PRPMDELVTLEADGSDILLVVPKATVLQNLDESQQRNDLM QLKLQLEGQVTELSRVQELERALARATARQEHTELMEQYKGISRS HGEITEERDILSRQGGDHVARILELEDDIQTISEKVLTKVEELD RLRDTVKALTREQEKLLGLQKEVQADKEQSEALQVAQQENHHL NLDLKEAKSNQEEQSAQQRLLKDKVAQMKDTLGOAQRVALEP |

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|------------|--|--|---|
| | | | LKEQLRGAQELAASSQQKATLLGEEELASAAAARDRTIAELHRSR LEVAEVNGKLAELGLHLKEEKQWSKERAGLLQSVAEKDKILK LSAEILRLKAVQEERTONQVFKTELAREKDSLVQLSESKRE TELRSALRVLQKEKEQLQEEKQELLEYMRKLEARLEKVADEKWN EDATTEDEAAVGLSCPAALTDSEDESPEDMRLHPMAFVSVETQ ASLLGLE |
| 7090 | 33 | 1775 | SVCWEDRYLKARMEESPLSRAPSRGGVNFNLNARTYIPNTKVEC HYTLPGTTPMSASDWIGIFKVEAACVRDYHTFVWSSVPESTTDG SPIHTSVQFQASYLEPKGAQLYQFRVYVNRQGVCGQSPFPQFRE PRPMDLVTLEADGGSDILLVVPKATVLQNLDESQQRNDLM QLKLQLEGQVTELSRVQELERALARATQEHTELMEQYKGISRS HGEITEERDILSRQQGDHVARILELEDDIQTISEKVLTKVELD RLRDTVKALTREQEKLLGQLKEVQADKEQSEAEQVAQENHHL NLDLKFAKSWQEEQSAQAORLKDQVQMDTLGQAQQRVALEP LKEQLRGAQELAASSQQKATLLGEEELASAAAARDRTIAELHRSR LEVAEVNGKLAELGLHLKEEKQWSKERAGLLQSVAEKDKILK LSAEILRLKAVQEERTONQVFKTELAREKDSLVQLSESKREL TELRSALRVLQKEKEQLQEEKQELLEYMRKLEARLEKVADEKWN EDATTEDEAAVGLSCPAALTDSEDESPEDMRLHPMAFVSVETQ ASLLGLE |
| 7091 | 186 | 1076 | BGMLTREHRCGRSEEQELEPWSPKKARSGRWLRNGFKRKMEEF EEPADSGQSLVPVYIYSPEYVSMCDSLAKIPKRASMVHSLIEAY ALHKQMRIVKPKVASMEEMATFHTDAYLQHLQKVSQEGDDHDP SIEYGLGYDCPATEGIFDYAAAIGGATITAAQCLIDGMCKVAIN WSGWHHAKKDEASGFCYLNDAVLGILRLRRKFERILYVDLDLH HGDGVEDAFSFTSKVMTVSLHKFSPGFFPGTGDVSDVGLGKGRY YSVNVPIQDGIQDEKYQICERYEPPAPNFGI |
| 7092 | 522 | 809 | KQGINEDQERSQKPRLGEGCEPISKRMKKLIKQKQWEEQREL KQKRKEKRKKLERQCCQMEPNSDGHDKRVRDVRVHSTRLII DCSFDXLM |
| 7093 | 454 | 655 | NFGVSGVELAQQASVMRMSFVIAACQLVLGLLMTSLTESSTQNS ECPQLCVCEIRPWFTPQSTYREA |
| 7094 | 2 | 508 | FVRSMHVGVGFASSRFPVVDLSWNQSTISFFGWAGSEEPFSPYG DIIAPLQDYGGIMAGLSDPWKKTLTYLTGGALLAAAYLLHE LLVIRKQKEIDSKDAIILHQFARPNNGVPSLSPFLCKMETYLRM ADLPYQNYFGGKLSAQGKMPWIEYNHEKVSGETEII |
| 7095 | 1 | 411 | IASSLPKMASLLQSDRVLYLVQGEKKVRAPLSQLYFCRYCSELR SLECVSHEVDSHYCPSCLENMPSAEAKLKNRCANCFDCPGCMH TLSTRATSISTQLPDDPAKTTMKKAYLLACGFCRWTSRDVGMAD KSVGE |
| 7096 | 224 | 2067 | ETRS LAVQEKPSQAGRRRSSRISFAGALFLTRFLQLQELLNNFC SAMSPAPDAAPAPASISLFDLSADAPVFQGLSLVSHAPGEALAR APRTSCSGSGERESPERKLLQGPMDISEKLFCSCTCDQTFQNHQE QREHYKLDWHRFNLKQRLKDKPLLSALDFEKQSSSTGDLSSISGS EDSDSASEEDLQTLDRERATFEKLSRPPGFYPHRVLFQNAQQGF LYAYRCVLGPHQDPPBEAELLQNLQSKGPRDCVVLMAAGHFA GAIFQGREVVTHKTFHRYTVRAKRGTAQGLRDARGGSPSHSAGAN LRRYNEATLYKDVRLDLAGPSWAKALEEAGTILLRAPRSGRSLF FGGKGAQLQRGDPLWDIPLATRRPTFQELQVLHKLTLTHVYE EDPREAVRLHSPQTHWKTVREERKKPTEEEIRKICRDEKEALGO NEESPQKQSGSEGEDGFQVELELVLTGTLDLCESEVLKRRR RKRKKEKSRDQAGAHRTLLQQTQEEEPSTQSSQAVAAPLGPL LDEAKAPGQPELWNALLAACRAGDVGVLLQLLAPSPADPRVLSL LSAPLGSGGFTLLHAAAAGRGSVVRLLEAGADFTVQCQDH |
| 7097 | 256 | 1228 | IRTKSAATWEAWPQCGREGSRIITEPCANAGSRQELQTERISS FLAAQGDQAFHSGLETNNSNELPLRVGLKVAQGSPLMGGQVSA |

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|------------|--|--|--|
| | | | SNFSRLHCRNANEDWMSALCPRLNDVPLHHLSTPGSHDTMTYC LNKKSPISEHERSLQLLNKALPCITRPVVLKWSVTQALDVTEQ LDAGVRYLDLRIAHMLEGSEKNLHFVHMVYTTALVEDTLTEISE WLERHPREVVLICARNFEGLSEDLHEYLVACIKNIFGDMLCPRG EVPTRLRQLWSRGQVIVSYEDSSLRHHELNPGVPYWWGNRVK TEALIRYLETMKSCGR |
| 7098 | 82 | 956 | SSFLKRCRKVLGCWGFSEQSLFSTLEBPRDEIDNYCVMRLQT EARSQGFAPNRPFPVNICRMTAVDGRGSSRETCRCHFHPSPLEA LVLLQDWQPGGVGICTSFLGISWALLDYHRAIRTCPLSKPLLG LGSSVIFYLWNLILLWPRVLAVALFSAFFPSYVALHFLGLWLV LLWVWLQGTDFMPDPSSSEWLYRVTVATILYFWSFNVAEGTRGR ATIHFAFLSDSILLVATWVTHSSWLPSPGIPQLWLFPVGGCGCF LGLALRLVYVHWHLHPSCCWKPDQVD |
| 7099 | 992 | 210 | LFRLAPGFLRLSLARQGYHQIWAFFFLPSGATATWPAASRSRLA ARSLPRSPARPGPNDALGEHDFRGQGVRAQRFRFSEEPGPGAD GAVLEVHVPQIGAGVSLPGILAAKCGAEVILSDSSELPHCLEVC RQSCQMNNLPHLQVVLGTWGHISWDLALPPQDIILASDVFFEP EDFEDILATIFYFLMHKNPKVQLWSTYQVRSADWSLEALLYKWD KCVHIPLESDADKEDIAESTLPGRHTVEMLVISFAKDSL |
| 7100 | 205 | 671 | ANGGFWEAAPGSEVSLPLWVPTASHSKTTALGIGSAPPPHLSVL FLFSFPQLGDPLEAFPVFKKYDRNGLNVSIECKRVSGLEPATV DWAFLDTKTNMQTMYEQSEWGWKREKREEMTDDRAWYLIAWEN SSVVPVAFSHFRFDVERGDEVLYW |
| 7101 | 2 | 503 | WRGGPRRAKRLAGGAVGWLLVRGVHVSVRAGGRFPRAADMKKD VRILLVGEPRVGKTSLIMSLVSEEFPEEVPRAEITIPADVTP ERVPTHTVDYSEAEQSDQLHQEISQANVICIVAVNNKHISIDK VTSRWIPLINERTDKDSRLPLILGKNKSDLVEYSR |
| 7102 | 2 | 503 | WRGGPRRAKRLAGGAVGWLLVRGVHVSVRAGGRFPRAADMKKD VRILLVGEPRVGKTSLIMSLVSEEFPEEVPRAEITIPADVTP ERVPTHTVDYSEAEQSDQLHQEISQANVICIVAVNNKHISIDK VTSRWIPLINERTDKDSRLPLILGKNKSDLVEYSR |
| 7103 | 119 | 438 | GSQSSVAVNIRSGTDEESMDLMNGQASSVNIATASEKSSSES LSDKGSSELKKSFDVAVFDVLKVTPEEYAGQITLMDVPVFKAIQ DELSSCGWNKKEKYSSAP |
| 7104 | 1670 | 795 | RLWEHRSVSAGASGWGLSSPGCLLLHPSLPPEERVDILINNAGV MRCPHWTTEDGFEMQFGVNLGEAWAGAAPWVQAILPRPPKVL GF*V*VKSDLFIILNPGHFLTNLLLDKLKASAPSRIINLSSLA HVAGHIDFDLWQTRKYNTKAAYCQS\KLAIVLFTKELSRRLQ GSGVTVNALHFGVARTELGRHTGIHGSTFLQHHN\WAHLLAAS KSPRSWPAPQHNTLAVAEELA\VISGKYFDGLKQKAPAPEAD EEVARRLWAESARLVGLEAPSVREQPLPR |
| 7105 | 765 | 143 | GQMCRRPSPKSTSCLSMTCDLP/RGLQDPQCLALFRVAVDKHQA LLKAAMSGQGVDRHLFALYIVSRFLHLQSPFLTQVHSEQWQLST SQIPVQOMHLFDVHNYPDYVSSGGGFGPADDHGYGVSYIFMGDG MITHISSKSSTKTDSHRLGQHIEDALLDVASLPQAGQHFKRR FRGSGKENSRRHRCGFLSRQTGASKASMTSTDF |
| 7106 | 14 | 1064 | GLQAGHPHPRSASRIPEADTH\YSKLQRAFDSIVNKDHKRMFGT YFRVGFSGSKFGDLDEQEFVYKEPAITKLPEISHRLEAFYGC GAEFVEVIKSDSTPVDKTKLDPNKAYIQITFVEPYFDEYEMKDRV TYFEKNFNLRRFMYTTPFTLEGRPRGELHEQYRRNTVLTTHMAF PYIKTRISVIQKEEFVLTPIEVAIEDMKKKTQLAVAINQEPD AKMLQNVLQGSVGATVNGGLEVAQVFLAEIPADPKLYRHHNKL RLCFKEFIMRCGEAVEKNKRLITADQREYQQLKKNYKLNKBNL RPMIERKIPELYKPIFRVESQKRDSFHRSSFRKCBTQLSQGS |
| 7107 | 1145 | 591 | *I*NLQTGKKK |

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|------------|--|--|---|
| 7108 | 1 | 942 | VKVALLLTNLEQPRTESEWENSFTLKMFLQFVNLSSTFYIAP FLGRFTGHPGAYLRRLINRWLEECPSGCLIDLQCMQGIIMVLK QTWNNFMELGYPLIQNWTRRKVRQEHGPERKISFPQWEKDYNL QPMNAYGLFDEYLEMILQFGFTTIFVAAPLAPLLALLNNIIBI RLDAYKFVTQWRRLASRAKDIGIYWGILEGIGILSVITNAFVI AITSDFIPRLVYAYKYGPCAGQGEAGQKCMGVYNASLSVFRIS DFENRSEPESDGSEFSGTPLKYCRYDRDPPHSLVPYGYTLQF WHVLAW |
| 7109 | 964 | 102 | WDQRKNSLVPGPAGHPAQEEPEWKKESLGAQAQALSIQLOPKE TQFPFKSEQVYLHFLSVVTEDEGPEPKDKGSLPQPPITEVESQVF SEKLATDSTTFEATSEGTLELQQRNPKAERLRWSPAQESFRQM VVIHKEIPTGKKDHECSECGKTFIYNHLVHVHSGEKPKYC SDCGKTFKQSSNLGQHQRHTGKPFECNECGKAFRWGAHLVQH QRIHSGEKPYECNECGKAFSQSSYLSQHRRHISGEKPFICKECG KAYGCSELIRHRRVHARKEPSH |
| 7110 | 96 | 697 | RLDNFSGFLVEVTKEERHIVKPLYDRYRLVKQMLTRASITPVIG SPSTKRRGQMLQPIIEGETAHFFEEIKKEEEDGVNLSSELGDM KTAVQVQSSSLKNSGSDVEENQEKALDLRLSSRAASMPLELEQ LWKARAEKKLRKTLREFEEAFYQONGRGAQEDRVPVLEBYRE YKKIKAKLRLLLEVLISKQDSSKSI |
| 7111 | 2 | 414 | GSGLYRGPTFGGQCINWPNMPPDHERNFGFTQFALEINELTAE LKRSPLSTITRLRPDQRYLEGNIAAEAKRRIEQLORDRRKV MEENNIHVQARFFRRQTDSSGKEWVNTNTYWRRLRAEPGYGNMD GAVLW |
| 7112 | 103 | 495 | PRCPFVADRGRIGGLPDVVTIMEGKTLNLTCTVFGNPDPEVIW FKNDQDIQLSEHFSVKVQAKYVSMITIKGVTSSEDSGKYSINIKN KYGGEKIDVTVSVYKHGEKIPDMAPPQAKPKLIPASASAAGQ |
| 7113 | 1 | 824 | KCLRQAWHEAPSSSLAFTWCSREERAEGGGLNHRSTTRDPKPPG LRPSQRPMDKKKKRSPKPCLAQPAQAPGTLRRVPVPTSHSGSL ALGLPHLPSFKQRAKFRVGKEKCRPVLAGGSGSAGTPLQHSF LTEVTDVYEMEGGLNLLNDFHSGRLQAFGKECSFEQLEHVREM QEXLARLHFSLDVCGEEEDDEEEDGVTEGLPEEQKKTMDRNL DQLLSNLGSCLGALVPGMRGGEGTYSQSHSWALGEKGVGHGSK SSGPLNLPRR |
| 7114 | 3 | 1492 | VVEVDEQIDHYKESQDKFLWQAAFIGKETLKDSEGOECKICRKI IYLNTDFVSVKQRLPKYYSWERCSEKHLNLFQGNRSYVRKKDDG CKAYWKVCLHYNLHKAQPAERFFDPNQRGKALHQKQALRKSQRS QTGEKLYKCTECGKVFIQKANLVVHQRTHTGKPYECCECAKAF SQKSTLIAHQRTHTGKPYECSECGKTFIQKSTLIKHQRTHTGE KPFVCDKCPKAPKSSYHLIRHEKTHIRQAFYKGIKCTSSLIYQ RIHTSEKPCQSEHGKASDEKPSPTKHWRTHTKENIYECSEKCGKS FRGKSHLSVHORHTGKPYECSCGKTFSGKSHLSVHHRHTG EKPYBCRCGKAFGEKSTLIVHQRMTGKPYKNECGKAFSEK SPLIKHQRIHTGERPYECTDCKKAFSRKSTLIKHQRIHTGKPY KCECGKAFSVKSTLIVHHRHTGKPYECRCGKAFSGKSTLI KHQRTHTGDKNL |
| 7115 | 1 | 947 | NAAHGYNWLWCMIIPPDWLDRCDESAPITPAMIGCSPVVD REYFGDIGLLDPGMEVYGGENVKLGMRVWQCGGSMEVLPCSRVA HIERTRPYNNDIDYAKRNALRAAEVWMDDFKSHVYMAWNIPM SNPGVDFGDVSERLALRQLKCRSFKWYLENVYPMRVYNNLT YGEVRNSKASAYCLDQGAEDGDRAILYPCGMSSQLVRYADGL LQLGPLGSTAFLPDSKCLVDDGTGRMPTLKKCEDVARPTQRLWD FTQSGPIVSRATGRCLLEVMSKDANFGLRLVVQRCGQKWMIRN WIKHARH |
| 7116 | 866 | 95 | RVMRRNAEVIIEKLMSKSWAKFRPGEPWKGYPNIDPETDPYVT PGSVINNLINTVREVDHLDRNSGSSSLNTTLPSTSAWSSIR |

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|------------|--|--|---|
| | | | ASNYNVLPSSTAQSTSARNSDSKLTWSPGSVTNTSLAHELWKVP LPPKNITAPSRPPFGLTGQKPLSTWDNSPLRIGGGWGNSDARY TPGSSWGESSSGRITNWLVLKNTLPQIDGSTRRLCMQHGLIT FHLNLPHGNALVRYSSKEEVVKAQKSLHISDLFLLTL |
| 7117 | 695 | 1261 | LLISTPGGCHPPFSSIEFTYTGAWGKALPAPHMPCAPGALPQGA FVSQAARAIPLLQPSQAAQAEGLSQPARACGALCSLPWPLRNWG SPIRLRPGGLRTPTNDRKTRTSAMACWARAQWDTLGLPLKLSHR GKVCRLRHPRTGVRGPGGAAGRQGGMGTRRRRTFTSGARDPGGL RVKHRCQPTGHLF |
| 7118 | 49 | 1863 | PHCEPNPGAGAMVLLHVLFEHAVGYALLALKEVEEISLLQPQVE ESVNLNGKFHSIVRLVAFPCFPASSQVALENANAVSEGVVHEDLR LLETHLPSKKKKVLGVGDPKIGAAIQEELGYNCQTGGVIAEI LRGVRLHFHNLVKGLTDL SACKAQLGLGHSYRAKVKFNVRVD NMIIQSISLLDQDKDINTFSMRVREWYGYHFPPELVKIINDNAT YCRLAQFIGNRRELNEDKLEKEELTMDGAKAKAILDASRSSMG MDISAILINIESFSSRVVSLSEYRQSLHTYLRKMSQVAPSL ALIGEAVGARLIAHAGSLTNLAKYPASTVQILGAEKALFRALKT RGNTPKYGLIFHSTFIGRAAAKNKGRISRYLANKCSIASRIDCF SEVPTSVPGEKLRQVEERLSFYETGEIPRKNLDVMKEAMVQAE EAAAEITRKLEKQEKRLKKEKRLAALALASSENSSTPEECE EMSEKPKKKKKQKQEVPOENGMEDEPSISFSKPKKKKSFKEEL MSSDLEETAGSTSIPKRKKSTPKEETVNDPEEAGHRSGSKKKRK FSKEEPVSSGPEEAAGKSSSKKKKKFKHAKSQED |
| 7119 | 49 | 1863 | PHCEPNPGAGAMVLLHVLFEHAVGYALLALKEVEEISLLQPQVE ESVNLNGKFHSIVRLVAFPCFPASSQVALENANAVSEGVVHEDLR LLETHLPSKKKKVLGVGDPKIGAAIQEELGYNCQTGGVIAEI LRGVRLHFHNLVKGLTDL SACKAQLGLGHSYRAKVKFNVRVD NMIIQSISLLDQDKDINTFSMRVREWYGYHFPPELVKIINDNAT YCRLAQFIGNRRELNEDKLEKEELTMDGAKAKAILDASRSSMG MDISAILINIESFSSRVVSLSEYRQSLHTYLRKMSQVAPSL ALIGEAVGARLIAHAGSLTNLAKYPASTVQILGAEKALFRALKT RGNTPKYGLIFHSTFIGRAAAKNKGRISRYLANKCSIASRIDCF SEVPTSVPGEKLRQVEERLSFYETGEIPRKNLDVMKEAMVQAE EAAAEITRKLEKQEKRLKKEKRLAALALASSENSSTPEECE EMSEKPKKKKKQKQEVPOENGMEDEPSISFSKPKKKKSFKEEL MSSDLEETAGSTSIPKRKKSTPKEETVNDPEEAGHRSGSKKKRK FSKEEPVSSGPEEAAGKSSSKKKKKFKHAKSQED |
| 7120 | 1991 | 64 | QLGTRRCLRGDKVTNAMQDFLVNTLEPRFIEPQTANLSVVFKDS NSTTPLIFVLSPGTDPAADLYKFAEEMKFSKKLSAISLGQGGGP RAEAMMRSSI ERGKWVFFQNCPLAPSWMPALERLIEHINPKVH RDFRLWLTSLPSNKFVVSILQNGSKMTIEPFRGVANLLKSYSS LGEDFLNSCHKVMEFKSLLSLCLPHGNALERRKFGPLGFNIPY EFTDGLRITCISQLKMFLEDDIPYKVLKYTAGIYNGGRVTD DWDRCIMNILEDFYNPDVLSPEHSYSASGIYHQIPPTYDLHG LSYIKSLPLNDMPFIFGLHDNANITFAQNETFALLGTIIQLQPK SSSAGSQGREEIVEDVTQNILLKVPEPINLQVMAKYPVLYEES MNTVLVQEVIRYNRLQVITQTLQDLLKALKGLVVMSSQLELMA ASLYNNTVPELWSAKAYPSLKPLSSWMDLLQRLDFLQAWIQDG IPAVFWISGFFFPQAFLTGTLQNFARKFVISIDTISFDKVMFE APSELTQRPQVGCYIHGLFLEGARWDPEAFQLAESQPKELYTEM AVIWLPTFNKRAQDQDFYLCPIYKTLTRAGTLSTTGHSYNI AVEIPTHQPRHWIKRGVALICALDY |
| 7121 | 2 | 546 | RPLRPVWLSLGSVMGLMTYGRROFQSLDTTMRRLIPPFREASAK LTLVDADAEAFAYLEAMRLPKNTPEEKDRRTAALQEGELRRV SVPLTLAETVASLWPALELARCGLACRSLQVAAKALEMGVF GAYFNVLINLRDITDEAFKQIHRVSSLLQEAQTQAAVLVDCL |

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|------------|--|--|---|
| 7122 | 2 | 546 | ETRQE RPLRPWVLSLGSMVGLMTYGRRQFQSLDTTMRRLIPFPREASAK LTTLVADAEAFAYLEAMRLPKNTPEEKDRRTAALQEGELRRV SVPLTLAETVASLWPAQLQELARCGNLACRSDLQVAAKALEMGVF GAYFNVLINLRDITDEAFKQDIHHRVSSLLQAKTQAALVLDCL ETRQE |
| 7123 | 1 | 1092 | KPAVPEARSAGTSEAGRSGAEVSCGVSVDGAAMRLTPRALCS AAQAARWENFPLCGRDVARWFFGHMAKGLKKMQSSLLKLVDCIIE VHDARIPLSGRNPLFQETLGLKPHLLVLNKMDDLADLTEQQKIMQ HLEGEGLKNVIFTNCVKDENVKQIIPMVTBELIGRSHRVHRKENL BYCIMVIGVFNVGKSSLSLRQHLRKGKATRVGGEGGITRAV MSKIQVSEPLMFLDTPGVLAAPRIESVETGLKLALCGTVLDHL VGEETMADYLLYTLNKHQRFYVQHYGLGSACDNVERVLKSAV KLGKTQKVVLTTGTGNVNIQPNYPAAARDFLQTFRRGLLSVM LDLDVLRGHPRV |
| 7124 | 2 | 382 | LPFTLLLAAPFAHLLPPGHQDQSPCHPGPALSFGTLGFLSWAM ANSGLQLLGYFLALGGWVGIIASTALPQWKQSSYAGDASIQLRS KVFVLESEWGGDSLGLPRDCGWSCLLHSAVRSEKGFWS |
| 7125 | 166 | 1127 | NCISEKRNYSFSMQKGGRTSRIRRRKLCSSSESRGVNESHKSE FIELRKLWKARKQDQSNLAPACPGTGRGIMSQTSLQEGQMIIS LPESCLLT\RDTVIRSYLGAYITKWKPPPSLLALCTFLVSEKH AGHRSLLEA\YLEILPKAYTCPVLEPEVVNLLPKSLKAKAEQ RAHVQEFFASSRDFSSQLPLFAEAVDSIFSYSALLWAWCTVNT RAVYL\SPGSGNAFLQSRTPVQLAPYLDLLNHS PHVQVKAAPNE ETHSYEIRTTSRWRKHEEVFCYGPNDQRLFLYGFVSVHNP ACVYVSRGWNQLCS |
| 7126 | 1 | 733 | CRDMAAFIVPSFARRCSQKGSGLHLPTQFWLWAAWSPRQGERGT SHSQAREPQRPGRWLLGSLQSSPGTLQAGTASRRRCQCMVQRNV QVATGRRVQVPKGAALGALGETSPGASRGMSGAGGCWALGWA PSVPLPSWLLGEGPPWLSIISDSGTQRPSPRRCPARSPWGPQC WRGGRJASAEASST*TPGSGSRARSRRSPGSRRRSASAPSPTP PTDACA*SCVAPAGSRSSRPAAA |
| 7127 | 1311 | 277 | GLPAMCST*KAGYEEETEGDCIPKDR*IEKRPFKEI*RRIPRIF AKQKQI*S*NSQKIGASEIDRGRKEADCDAPAAARIGAVSVFR RSTQEARVSPRSNAKSANLRAVRAD*WEHFVLLFHTPEQFLAEC ICRST**K*WHQLC*PLSSL*TGLKRKLL*VLFRI*WLKDCDV *FCQKI*FATNFCNWONLIQ*EE*KPVEYSVEN*HIMNLLPM*L CQSSLRDQTIIVTRM*RNYSMFRINMISSL*DGSIHIPKLHFI PALIFTLTVPINSCCQRPPLFAHQSIKTLASSGSPMLACLRLFL LVKKRAFIHTPRSPGCSV*CKHVLVKDNKNNCVGSSEV |
| 7128 | 2 | 5228 | GRVDLWTLILGRSALRELSQIEAELNKHWRRLLEGLSYKPPSP SSAEKVKANKDVASPLKELGLRISKFLGLDEEQSVQLLQCYLQE DYRGTRDSVKTVLQDERQSALILKIADYYEERTCILRCVLHL LTYFQDERHPYRVEYADCVDKLEKELVSKYRQCFEELYKTRAPT WETHGNLMTERRQVSRWFQCLREQSMLEIIFLYYAYFEMAPSD LLVLTGMFKEQGFGRSQTNRHVDETMDFVDRIGYFSALILVE GMDIESLHKCALDDRRELHQFAQDGLICQDMDCMLTFGDIPIH APVLLAWALLRHTLNPEETSSVVRKIGGTAIQNLVQYLTRELQ SLASGGNDCTTSTACMCVYGLLSFVLTSLELHNLGNQQDIIDTA CEVLADPSLELFWGTEPTSLGIILDSVCGMFPPLLSPLQLL RALVSGKSTAKKVYSFLDKMSFYNELYKHKPHDVISHEDGTLWR RQTPKLLYPLGGQTNLRIPQGTVGQVMDLDRAYLVRWEYSYSSW TLFTCEIEMLLHVSTADVIQHCQRVKPIIDLHVKVIISDLSIA DCLLPITSRIYMLLQRLTTVISPVDVIAVCNCLTVLAARNPA KVTWDLRHTGFLFFVAHPVSSLSQMSISAEGMNAGGYGNLMMNSE QPQGEYGVTIARLRLITTLVKGQLGSTQSQGLVPCVMFVLKEML |

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|------------|--|--|--|
| | | | <p>PSYHKWRYNSHGVREQIGCLILELIHAILNLCHETDLHSSHTPS</p> <p>LQFLCICSLAYTEAGQTVINIMIGVDTIDMVMAAQPRSDGAEG</p> <p>QGGQQLLIKTVKLAFSVTNVIRLKPPSNVVSPLQALSQHGAH</p> <p>GNNLIAVLAKYIYHKHPALPRLAIQLLRLATVAPMSVYACLG</p> <p>NDAAIRDAFLTRLQSK\IE\DMRIK\VMIL\EFLTVA\ETQP</p> <p>GLIELFLNLEVKG\SDGSKEFSLGMW\SCLHAV/VWELIDSQQ</p> <p>QDRYWCPLHRAAIAFLHALWQDRDSAMLVLRTPKPFWENLT</p> <p>SPLFGTSLSPSETSEPSILETCALIMKII CLEIYYVVKGS LDQP</p> <p>LKDTLKKFSIEKRFAYWSGYVKS LAVHVAETEGSSCTSLLEYQM</p> <p>LVSARWMLLIIATTHADIMHLTDSVVRRLFLDVLDTGKALLV</p> <p>PASVNCRLGSMKCTLLILLRQWKRELGSVDEILGPLEILEG</p> <p>VLQADQQLMEKTKAKVFAFIVLQMKEMKVS DIPQYSQVLNV</p> <p>CETLQEEVIALFDQTRHSLALGSATEDKDSMETDDCSRSRHRDQ</p> <p>RDGVCVLGLHLAKELCEVDEDDGDSWLQVTRRLPILPTLLTLEV</p> <p>SLRMKQNLHFTTEATLHLLTLARTQQGATAVAGAGITQSI CLEP</p> <p>LSVYQLSTNGTAQTPSARSKSLDAPSWPGVYRLSMLMEQLLKT</p> <p>LRYNFLPEALDFGVHQTFLQCLNAVTVQSLACLEEDHTVG</p> <p>FILQLSNFMKEWHFHLPLQMRDIQVNLGYLCOACTSFLHSRKM</p> <p>QHYLQNKNGDGLPSAV\AQRV\QRPSPAASAAPSSSKQPAADTE</p> <p>ASEQQALHTVQYGLLKILSKTLAALRHFTPDVCQILLDQSLDLA</p> <p>EYNFLFALSFTTPTFDSEVAPSGFTLLATVVALNMLGELDKKK</p> <p>EPLTQAVGLSTQAEGRTRTLKSLMFTMENC FYLLISQAMRYLRD</p> <p>PAVHPDKQRMKQELSSSELSTLLSSLSRYFRRGAPSSPATGVLP</p> <p>SPQGKSTSLSKASPESQEPLIQLVQAFVRHMQR</p> |
| 7129 | 1 | 1054 | <p>FRFRFRWRRLH*AGPASSAGGSPGEASGTMSEGLFPNINIKPR</p> <p>WDQSTF IGRANHFVTVDPRNILLTNEQLESARKIVHDYRQGI</p> <p>PPGLTENELWRAKYIYDSAFHPDTGEKMLIGRMSAQVPMNMTI</p> <p>TGCMMTFFYRTTPAVLEWQWINSFNAVNYTNRSADAPLTVNEL</p> <p>GTAVVSATTGAVATAGLNLTKHVSPLIGRFVFPFAAVAAANCI</p> <p>NIPLMRQRELKVGIPVTDENGRLGESANAQAQAITQVVVSRI</p> <p>MAAPGMAIPFFIMNTLEKKAFLKRFPPWMSAPIQVGLVGFCLVFA</p> <p>TPLCCALFPQKSSMSVTSLEAELQAKIQESHPELRRVYFNKGL</p> |
| 7130 | 2 | 780 | <p>HEVPSLQTSDDLPGSVQRCVSVVSQPNKENWCQDHLNLSGRKG</p> <p>ISAKSQPYHRSQSSSVLINSKMSDINYPSPDVGKQQLSLHRSS</p> <p>RCEHQDILLPDADSHQQTGTEKLSDLTLQDSQKVVVNRNPLN</p> <p>AQIATQNYFSNFKETDGEDDYVEIKSEDESELELSHNRRRS</p> <p>DSKFVDADFSDNVCSGNTLHSLNSPRTPKKPVNSKLGLSPYLT</p> <p>YNDSDKLNDYLWRGSPNQQNIVQSLREKFQCLSSSSFA</p> |
| 7131 | 805 | 573 | <p>AAAEGHIEVVKFLIEACKVNPFAKDRWGNIPLDDAVQFNHLEV</p> <p>KLQDYQDSYTLSETQAEAAAEALSKENLESMV</p> |
| 7132 | 1420 | 1087 | <p>IDMLLSGALVSGPYTLITTAVSADLGTGKSLKGNALHSTVTA</p> <p>IIDGTGSVGAALGPLLAGLLSPSGWSNVFYMLMFADACALLFLI</p> <p>RLIHKELSCPGSATGDQVPFKEQ</p> |
| 7133 | 2 | 3648 | <p>QQIPGLLPAHGESGDALRKPRIQKPITGHLLDFFTLPSLEKF</p> <p>BEELLEHLVQDHFQEGCGPLDGGALEILERRLRVGVHNGLG</p> <p>RPQVVVLVPEMDVALTRSASF SRKVVSSSKTSSGSQALVLRSL</p> <p>RLPEMVGHPAFAVIFQLEYVFSSPAGVDGNAASVTSLSNLACMH</p> <p>MVRWAVWNPILLEADSGRVTLPQGGIQPNPSHCLVYKVPASMS</p> <p>SEEVQVESGTLRFQFSLGSEEHLDAPTEPVSGPKVERRRPSRKP</p> <p>PTSPSSPPAPVPRVLAAPQNSPVGPGLSISQLAASPRSPQHCL</p> <p>ARPTSQLPHGSQASPAQAEFFLEAGISHLEADLSQTSLVLETS</p> <p>IAEQQLQELPFTPLHAPIVVGQTQRSSAGQPSRASVLLQSSGFP</p> <p>EILDANKQPAEAVSATEPVTFNPQKEESDCLQSNEMVLQFLAFS</p> <p>RVAQDCRGTSWPKTVYFTFQFYRFPPTTPRLQLVQLDEAGQPS</p> <p>SGALHTHLLVPVSRDGTDFDAGSPGFQLRYMVGFGFLKPGERRCFA</p> <p>RYLAVQTLQIDVWDGDSLLIGSAVQMKHLLRQGRPAVQASHE</p> |

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|------------|--|--|--|
| | | | LEVVA TEYEQDNM VVSGDMLGFGRVKPIGVHSVVKGRHLHLTLAN VGHPC EQKVRGCSTLPFSRSRVISNDGASRFSGGSLTTGSSRR KHVVQAQKLADVDSELAAMLLTHARQGGKGPQDVSRSDATRRRK LERMRSVRLQEGAGDLGRRGTSVLAQQSVRTQHLRDLQVIAAYR ERTKAESIASLLSLAITTEHTLHATLGVAEFFEVLKPNHNTQH TVTVEIDNPESLVIIVDSQEWDRDFKGAAGLHTPVEEDMFHLRGSL APQLYLRPHETAHVFPKQSFSAQOLAMVQASPGLSNEKGMDAV SPWKSSAVPTTKHAKVLFRAAGGKPIAVLCLTVELQPHVVDQVFR FYHPELSFLKKAIRLPPWHTFPGAPVGMGLEDPPVHVRCSDPNV ICETQNVGPGEPRIFLKVASGPSPEIKDFVVIYSDRWLATPT QTWQVYLHSLQRVDVSCVAGQLTRLSLVLRGTQTVRKVRFTSH PQELKTDPKGVFVLPFRGVQDLHVGVRLRAGSREVFHLNLVDVD CHQLVASWLVLCCCRQPLISKAFIIMLAAGEGKGVNKRITYTNP YPSRRTFHLHSDHPELLRFREDSFQVGGGTYTIGLQFAPSQRV GEEELIYINDHEDKNEEAFCKVVIQ |
| 7134 | 2115 | 1111 | GGEFGSYPPHVGSLGTLDPHYVLLVHYDNPTYEGLIDNSG LRLFYTMDIRKYDAGVIEAGLWVSLPHTIPPMPPEFQSEGHCTL ECLEALEAEKPSGIHVFAVLLHAHLAAGRGIRLRHFRKGKEMKL LAYDDDFDNFQEFQYLKEEQTLPGDNLITECRYNKDRAGMT WGGLSTRSEMCLSYLLYPRINLTRCASIPDIMEQLQFIGVKEI YRPVTTWPFIIKSPKQYKNLGFMDAMNFKWTKKEGLSFNKLVL SLPVNVRCSKTDNAEWSIQGMTALPPDIERPYKAEPVCGTSSS SSLHRDFSINLLVCLLLSCTLSKSL |
| 7135 | 2 | 2072 | FVPRVTPRSLSLQGPKEGVSITQPLPSSYLIFRAASESDGRC WDALELALRCSSLLRLGTCKPGRDGEPTSPDASPSLSCGLPA SATVHPDQDLFPLNGSSLENDASFSDKSERENPEESDTETQDHSR KTESGSDQSETPGAPVRRGTTYVEQVQEEELGELGEASQVETVSE ENKSLMWTLKQLRPGMDLSRVLPFTFVLEPRSFNLKLSDDYYH ADLLSRAAVEEDAYSRMKLVLRWYLSGFYKPKGKIKKPYNPILG ETFRCCWFHPQTDSTFYIAEQVSHHPVSAFHVSNRKGDFCIS GSITAKSRFYGNLSALLDGKATLTFNLRAEDYTLTMPYAHCKG ILYGTMTLEGGKVITIECAKNNFQAQLEFKLKPFFGGSTSINQI SGKITSGEVVLASLSGHWRDVFKEEGSGSSALFWTPSGEVRR QRLRQHTVPLEEQTELESERLWQHVTTRAISKGDQHRATQEKFAL EAAQRQRARERQESLMPWKPQLFHLDPITQEWHYRYEDHSPWDP LKDIAQFEQDGIILRTLQGEAVARQTTFLGSPGPRHRSRSGPDQRL RKASDQPSGHSQATESGSPESCPELSDEEQDGFVPGGESPC PRCRKEARRLOALHEAILSIREAQQLHRHLSAMLSSTARAQA PTFGLLQSPRSWFLLCVFLACQLFINHILK |
| 7136 | 2 | 418 | DFVPSFRPSPGNTSQTWVLLRAATLEKEVAGLREKIHHLDDMLK SQQRKVRQMIQLQNSKAVIQSKDATIQELKEKIAYLEAENLEM HDRMEHLIEKQISHGNFSTQARAKTENPGSIRISKPPSPKMPV IRVVET |
| 7137 | 2 | 466 | WASGMSTVPGGSRHSLGIQVRGGWGVGTGGEESLTVPVADTWQA GSFKVATQERNPQRAQMLRRQKKGVVPFLGDFLTELQRLDSAI PDDL DGN TNKRSKEVRVLQEMQLLQVAMNYRLRPLEKFVITYFT RMEQLSDKESYKLSQLEPENP |
| 7138 | 2 | 466 | WASGMSTVPGGSRHSLGIQVRGGWGVGTGGEESLTVPVADTWQA GSFKVATQERNPQRAQMLRRQKKGVVPFLGDFLTELQRLDSAI PDDL DGN TNKRSKEVRVLQEMQLLQVAMNYRLRPLEKFVITYFT RMEQLSDKESYKLSQLEPENP |
| 7139 | 1 | 357 | SLRNSARGLKMAASAARGAAALRRRSINQPVAFVRRIPWTAASSQ LKEHFAQFGHVRRCILPFDKETGPHRGLGWVQFSSEGLRNALQ QENHIIDGVKVQVHTRRPKLPQTSDDDEKDF |
| 7140 | 1401 | 1957 | RASSLQVLKANGGLIPSSFQQQHTGQYALESLFDLKVYDCFCFSF NMNVSLKQLRPSQPWPRGKCRKTPGWEEARPKAQDLRGDLGKT |

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|------------|--|--|---|
| | | | QAGPAEAHTRGPPRLPAATGCPHLPGLLSGISVDIDPTGLQSQ WTPKQDPPPLMFSEDYQKSLLQYHLGLDQKLRKYVVGELIWNF ADFTMNQCG |
| 7141 | 124 | 1073 | LDSRCWLDMELEEDVRFIVDETLDGGLSPSDSREEEDITVL VTPEKPLRRGLSHRSDPNAVAPAPQGVRLSLGPLSPEKLEEILD EANRLAAQLEQCALQDRESAGEGLGPRRVKPSPRETFVLKDSF VRDLLPTVNSLTRSTPS/LKQPDASTPE***EGVSQSGPGYIWK EALQHEEGVTHLQSVPCIQKPSIFSS\SRSTPPVRGRAGPSGRA AASEETRAAKLRGAAAKSSCOLPIPSAIPRPASRMPLTSRSVPP GRGALPPDSLSTRKGLPRPSTAGHRVRESGHKVPVSQRLNLPVM GATRSNLQPP |
| 7142 | 658 | 839 | LIFLMLHMEKMLSSVTLHIRAFLYWICLKPTSCLIFQNVNLL KK*SRVGVVVVMCRT/YSSDLQVGVIKPWLLGSDAAHDLDT LKKNKVTHILNVAYGVENAFSLDFTYKSSISILDLPETNILSYFP ECFEFIEAKRKDGCVVLVHCNA |
| 7143 | 3 | 773 | SLEMSSDGEPLSRMDSEDSISSTIMDV DSTISSGRSTPAMNQG GSTTSSSKNIAYNCCWDQCQACFNSSPDADHRSIHVDGQGG VFVCLWKGCKVYNTPTSPSQSWLQRHMLTHSGDKPFKCVVGGCNA SFASQGGGLARHVP THFSQQNSSKVSSQPKAKEESPSKAGMNRK KLKNKRRRSLARPHDFFDAQTLDAIRHRAICFNLSAHIESLGKG HSVVFHSTVSILLFFQIKYKTLQKNISTIIISKSLKI |
| 7144 | 1 | 988 | FRVNMQDGGGPSAEHSAEESAGMEARFLGLPDAAGSSGPTPAR RCPAPRPAGVSIVIRDEVEKYNRNGVNALQLDPALNRLFTAGR SIIRIWSVNHQKQDPYIASMEHHTDWNIDIVLCCNGKTLISASS DTTVKVVNAHKGFCMSTLRTHKDYVKALAYAKDKELVASAGLDR QIFLWDVNTLTALTASNNTVTTSLSGNKDSIYSLAMNQLGTII VSGSTEKVLRVWDPRCTAKLMKLGHTDNV KALLNRDGTQCLS GSSDGTIRLWSLGQQRCIATYRVHDEGVWALQVNDAFTHVYSGG RDRKIYCTDLRNPDIRVLICE |

TRADOC:1416260.1(%CSK011.DOC)

WHAT IS CLAIMED IS:

1. An isolated polynucleotide comprising a nucleotide sequence selected from the group consisting of SEQ ID NO:1-1786 and 3573-5358, a mature protein coding portion of SEQ ID NO:1-1786 and 3573-5358, an active domain of SEQ ID NO:1-1786 and 3573-5358, and complementary sequences thereof.
2. An isolated polynucleotide encoding a polypeptide with biological activity, wherein said polynucleotide hybridizes to the polynucleotide of claim 1 under stringent hybridization conditions.
3. An isolated polynucleotide encoding a polypeptide with biological activity, wherein said polynucleotide has greater than about 90% sequence identity with the polynucleotide of claim 1.
4. The polynucleotide of claim 1 wherein said polynucleotide is DNA.
5. An isolated polynucleotide of claim 1 wherein said polynucleotide comprises the complementary sequences.
6. A vector comprising the polynucleotide of claim 1.
7. An expression vector comprising the polynucleotide of claim 1.
8. A host cell genetically engineered to comprise the polynucleotide of claim 1.
9. A host cell genetically engineered to comprise the polynucleotide of claim 1 operatively associated with a regulatory sequence that modulates expression of the polynucleotide in the host cell.
10. An isolated polypeptide, wherein the polypeptide is selected from the group consisting of:

- (a) a polypeptide encoded by any one of the polynucleotides of claim 1; and
 - (b) a polypeptide encoded by a polynucleotide hybridizing under stringent conditions with any one of SEQ ID NO:1-1786 and 3573-5358.
11. A composition comprising the polypeptide of claim 10 and a carrier.
12. An antibody directed against the polypeptide of claim 10.
13. A method for detecting the polynucleotide of claim 1 in a sample, comprising:
- a) contacting the sample with a compound that binds to and forms a complex with the polynucleotide of claim 1 for a period sufficient to form the complex; and
 - b) detecting the complex, so that if a complex is detected, the polynucleotide of claim 1 is detected.
14. A method for detecting the polynucleotide of claim 1 in a sample, comprising:
- a) contacting the sample under stringent hybridization conditions with nucleic acid primers that anneal to the polynucleotide of claim 1 under such conditions;
 - b) amplifying a product comprising at least a portion of the polynucleotide of claim 1; and
 - c) detecting said product and thereby the polynucleotide of claim 1 in the sample.
15. The method of claim 14, wherein the polynucleotide is an RNA molecule and the method further comprises reverse transcribing an annealed RNA molecule into a cDNA polynucleotide.
16. A method for detecting the polypeptide of claim 10 in a sample, comprising:

a) contacting the sample with a compound that binds to and forms a complex with the polypeptide under conditions and for a period sufficient to form the complex; and

b) detecting formation of the complex, so that if a complex formation is detected, the polypeptide of claim 10 is detected.

17. A method for identifying a compound that binds to the polypeptide of claim 10, comprising:

a) contacting the compound with the polypeptide of claim 10 under conditions sufficient to form a polypeptide/compound complex; and

b) detecting the complex, so that if the polypeptide/compound complex is detected, a compound that binds to the polypeptide of claim 10 is identified.

18. A method for identifying a compound that binds to the polypeptide of claim 10, comprising:

a) contacting the compound with the polypeptide of claim 10, in a cell, under conditions sufficient to form a polypeptide/compound complex, wherein the complex drives expression of a reporter gene sequence in the cell; and

b) detecting the complex by detecting reporter gene sequence expression, so that if the polypeptide/compound complex is detected, a compound that binds to the polypeptide of claim 10 is identified.

19. A method of producing the polypeptide of claim 10, comprising,

a) culturing a host cell comprising a polynucleotide sequence selected from the group consisting of a polynucleotide sequence of SEQ ID NO:1-1786 and 3573-5358, a mature protein coding portion of SEQ ID NO:1-1786 and 3573-5358, an active domain of SEQ ID NO:1-1786 and 3573-5358, complementary sequences thereof and a polynucleotide sequence hybridizing under stringent conditions to SEQ ID NO:1-1786 and 3573-5358, under conditions sufficient to express the polypeptide in said cell; and

b) isolating the polypeptide from the cell culture or cells of step (a).

20. An isolated polypeptide comprising an amino acid sequence selected from the group consisting of any one of the polypeptides SEQ ID NO:1787 -3572 and 5359-7144, the mature protein portion thereof, or the active domain thereof.
21. The polypeptide of claim 20 wherein the polypeptide is provided on a polypeptide array.
22. A collection of polynucleotides, wherein the collection comprising the sequence information of at least one of SEQ ID NO:1-1786 and 3573-5358.
23. The collection of claim 22, wherein the collection is provided on a nucleic acid array.
24. The collection of claim 23, wherein the array detects full-matches to any one of the polynucleotides in the collection.
25. The collection of claim 23, wherein the array detects mismatches to any one of the polynucleotides in the collection.
26. The collection of claim 22, wherein the collection is provided in a computer-readable format.
27. A method of treatment comprising administering to a mammalian subject in need thereof a therapeutic amount of a composition comprising a polypeptide of claim 10 or 20 and a pharmaceutically acceptable carrier.
28. A method of treatment comprising administering to a mammalian subject in need thereof a therapeutic amount of a composition comprising an antibody that specifically binds to a polypeptide of claim 10 or 20 and a pharmaceutically acceptable carrier.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US00/34263

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C07H 21/04; C12N 15/11, 15/63, 15/70, 15/82, 15/85; C07K 14/00
 US CL : 536/23.1; 435/320.1, 455, 468, 530/300, 350

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 U.S. : 536/23.1; 435/320.1, 455, 468, 530/300, 350

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
 MEDLINE, EAST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|--|------------------------|
| A | WAJIMA et al. The cDNA cloning and transient expression of an ovary-specific 17beta-hydroxysteroid dehydrogenase of chickens. Gene. 1999, Vol.233, pages 75-82 | 1-11, 13-16, and 19-26 |
| A | US 5,175,095 A (MARTINEAU et al) 29 December 1992 (29.12.1992), see especially columns 3-18. | 1-11, 13-16, and 19-26 |
| A | Database PubMed, ID No. 2393392, FREUDENSTEIN et al. mRNA of bovine tissue inhibitor of metalloproteinase: sequence and expression in bovine ovarian tissue. Biochem. Biophys. Res. Commun. August 1990. Vol.171. No. 1. pages 250-256, see Abstract. | 1-11, 13-16, and 19-26 |
| A,P | Database PubMed, ID No. 10919256, HENNEBOLD et al. Ovary-selective genes I: the generation and characterization of an ovary-selective complementary deoxyribonucleic acid library. Endocrinology. August 2000. Vol.141. No.8. pages 2725-2734, see Abstract. | 1-11, 13-16, and 19-26 |
| A | Database PubMed, ID No. 2760883, BEIL et al. Synthesis of polypeptides by the cervix of the baboon (Papio anubis). J. Reprod. Fertil. July 1989. Vol.86. No.2. pages 535-544, see Abstract. | 1-11, 13-16, and 19-26 |
| A,P | Database PubMed, ID No. 10830289, HINSHELWOOD et al. A 278 bp region just upstream of the human CYP19 (aromatase) gene mediates ovary-specific expression in transgenic mice. Endocrinology. June 2000. Vol.141. No.6. pages 2050-2053, see Abstract. | 1-11, 13-16, and 19-26 |

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

| Special categories of cited documents: | |
|---|--|
| "A" document defining the general state of the art which is not considered to be of particular relevance | "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention |
| "E" earlier application or patent published on or after the international filing date | "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone |
| "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) | "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art |
| "O" document referring to an oral disclosure, use, exhibition or other means | "&" document member of the same patent family |
| "P" document published prior to the international filing date but later than the priority date claimed | |

Date of the actual completion of the international search

Date of mailing of the international search report

Name and mailing address of the ISA/US
 Commissioner of Patents and Trademarks
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 Michael Woodward
 Telephone No. (703)308-0196

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US00/34263

Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claim Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claim Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claim Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:
This includes 4 invention Groups and 3572 sequence species

1. ☒ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

☐
☐

- The additional search fees were accompanied by the applicant's protest.
No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US00/34263

This application contains the following inventions or groups of inventions which are not so linked as to form a single inventive concept under PCT Rule 13.1. In order for all inventions to be searched, the appropriate additional search fees must be paid. Group I, claims 1-11, 13-16, and 19-26, drawn to nucleic acid molecules, vector molecules and host cells containing said nucleic acids, polypeptides, methods of making said polypeptides and method of detection using said nucleic acids and polypeptides. Group II, claim 12 and 28, drawn to antibodies and method of treatment using composition comprising said antibodies. Group III, claims 17-18, drawn to methods of identifying a binding partner to a polypeptides. Group IV, claim 27, drawn to method of treatment using composition comprising polypeptides.

The inventions listed as Groups I-IV do not relate to a single inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Group I encompasses nucleic acids, polypeptides expressed thereby, vectors and host cells containing same, respectively, and methods of making as well as the first method of use of this subject matter. Groups II-V all are directed to different special technical features as summarized as follows: Group II is directed to an antibody and method of treatment using same, which antibody undergoes recognition and binding reactions wherein what is bound is different from what is bound by the compositions of Group I. For example, the polypeptides of Group I do not bind the polypeptides of Group I as the antibody of Group II does. Identification of binding partner and treatment are clearly different special technical features from detection. Group III is directed to the identification of a binding partner of a polypeptide, which is not identified in any of the other Groups and thus clearly contains its own special technical feature. Group IV is directed to treatment, which is a clearly different methods than the methods in the other Groups. Thus, in summary, each of Groups I-IV are directed to different special technical features and thus support this lack of unity.

Additionally, each of the claims is directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single inventive concept under PCT Rule 13.1. In order for more than one species to be searched, the appropriate additional search fees must be paid. The species are as follows: The claims include a series of polynucleotides and the polypeptides encoded thereby as represented by the sequences of SEQ ID Nos: 1-1786, and 3573-5358. Each of these polynucleotide sequences encodes a separate polypeptide and thus represent a separate gene. Therefore, each of these genes defines its own special technical feature. In summary, one species is a gene represented by one polynucleotide sequence and one polypeptide sequence encoded thereby.